Educational Theory

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SIX THEORIES OF INTELLECTUAL DISCIPLINE

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FOR A VARIETY OF REASONS THE TERMS "INTELLECTUALISM" AND "INTELLECTUAL DISCIPLINE" have fallen gradually into disrepute among a significant number of contemporary educators and philosophers. Because increasing prestige is being attached to what experience validates, those who still conceive of intellect as something apart from experience are finding their position increasingly difficult to maintain. The older notion of mind as a separate entity, operating under its own power, carried with it the implication that it was something sacrosanct and undefiled by mundane affairs. Moreover, the intellect was regarded as the seat of reason, and reason was held to be what most sharply differentiated man from the brutes. Hence, to train the reason was believed to be the ultimate purpose of education, if not the chief end of man.

I

It has been customary to characterize a disciplined intellect by at least two factors: first, by the possession of a proper fund of knowledge, and, second, by an ability to reason with such knowledge for the purpose of arriving at logical conclusions. So far as it went, there was nothing particularly wrong with such a conception. Certainly, reasoning could scarcely take place if there were no knowledge to reflect upon, and surely knowledge could be of little significance if unutilized by reason. Unfortunately, however, both the content of knowledge and the method of reasoning soon became fixed—in the history of Western thought, at least—in the hands first of Plato and then of Aristotle. The content of knowledge was derived, not from what was meaningful and verifiable in the world about us, but from speculation about eternity, destiny, and other matters remote from everyday affairs. Similarly, methods of reasoning stemmed, not from serviceable modes of inquiry, but from the fixed requirements of formal logic. Resort to systems of classical reasoning was of course consonant with the fact that metaphysical problems could scarcely be attacked by any other than metaphysical means. Knowledge thus came to be regarded as acquaintance with metaphysical truth, while

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reasoning meant skill in methods of logical analysis. This fixed structure of knowledge and reasoning has been perpetuated, with few exceptions, throughout the whole course of Western idealism, eventuating in what has been termed "the genteel tradition" and reaching a culmination in the intricate philosophic system of Hegel.

In view of the fact that little importance was then attached to empirical inquiry, it is hardly surprising that Plato should have chosen as the object of knowledge a realm of speculation quite removed from the practical problems of a workaday world. Nor is it likely that Plato would have had either the time or the inclination to philosophize about other realms had not the social hierarchy of his time permitted him to lead the life of an aristocrat, if not that of a philosopher-king. This is not to imply that Plato had nothing to say, or that his insights were inconsequential simply because they were grounded in speculation. We could do worse that to heed the remarks of Plato when he speaks so movingly of the true, the good, and the beautiful. But when he idealizes such concepts to the extent of divorcing them from the world of experience, when he defines them in terms that preclude their translation into modes of human behavior, and when he attaches to them qualities of eternalness, autonomy, and priority over the urgent issues of experiencing man, he strains his lines of communication, despite his captivating eloquence. What Platonic philosophizing did was to cause the content of intellectuality to be defined in terms of knowledge about a so-called "ultimate" reality—a reality that purportedly transcended space, time, and circumstance.

Methods of reasoning about an ultimate reality became understandably limited to what could be called ratiocination, or "speculation about the speculative." At least, such methods could scarcely be considered empirical, inductive, or experimental in the later sense of these terms. And so a system of logic came into being which took as its purpose either to "prove" through nonempirical reasoning what had been born of a priori speculation, or to build quite "logical" hierarchies, often magnificient in their intricacies, upon premises that were as faulty as the undeveloped sciences of their day.

II

Logic thus came to be crystallized in an "if . . . then" kind of reasoning, a modification of the Aristotelian syllogism. "If" the gods are infallible, "then" their authority ought not to be criticized; "if" diseases are caused by evil spirits, "then" the way to cure them is to drive out the evil spirits; "if", according to Hegel, only wholes are knowable, "then" nothing can ever be really known. In this kind of reasoning, logic consisted almost entirely in the internal consistency of an argument. It was not so much the method that was faulty as it was the framework of unexamined premises in which the method operated. Much importance was attached to the "then" clause (the conclusion), while the "if" clause (the premise) was more axiomatic than critical. Although such early methods have been largely superseded by more critical modes of inquiry, nevertheless, the conclusions of earlier thinkers have become a quasi-sacrosanct body of "truth," almost ineradicably embedded in the stockpile of Western culture. "This illustrates an important truth," says Bertrand Russell, "namely, that the worse your logic, the more interesting the consequences to which it gives rise."[1]

[1]Bertrand Russell, *A History of Western Philosophy* (New York: Simon and Schuster, 1945), p. 746.

The foregoing conceptions of mentality and reasoning have their own peculiar disciplines, just as intellect and logic defined in other terms require an altered understanding of discipline. Whether the intellect is to be trained from without in terms of externally imposed authority or whether it is to be shaped from within by means of self-imposed strictures, the fact remains that discipline of some kind is involved whenever thinking takes place. Indeed, as Havelock Ellis has said, "Life itself must always be a discipline; it is so dangerous that only by submitting to some sort of discipline can we become equipped to live in any true sense at all." To be disciplined in the act of doing something means to be trained—either coercively or voluntarily—to make certain choices and to reject others; it means likewise to assume obligation both for the outcomes of whatever is chosen and for the outcomes of whatever is rejected. A person who is disciplined in respect to obeying commands will put aside inclinations to disobey; likewise, an individual trained in the art of clear thinking will reject whatever he considers unsound or illogical. Intellectual discipline may then be defined as *the rigorous employment of a particular method of reasoning and a strict adherence to the conclusions it yields*. It now becomes appropriate to examine some conceptions of intellectual discipline that have been most influential in shaping our educational and cultural values.

III

First, intellectual discipline may be understood as *a rigorous acquisition of funded knowledge as an intrinsic and final end*. Foremost among those subscribing to this position are the philosophic and literary classicists, to whom knowledge itself represents power. The gearing of knowing to some further purpose is held to be a desecration of the idea that knowledge is its own sublime end. Mind is conceived as very much like a muscle—the more it is exercised, the more efficient and limber it becomes. Development of ability in abstract reasoning and in dealing with general propositions is emphasized, while cultivation of proficiency in professional and vocational skills is not to be viewed as a proper domain of education.

The true purpose of education is to produce a trained intelligence, which will then be applicable in all areas of endeavor and in every human situation, regardless of place, time, or conditions. In the words of Robert M. Hutchins, a modern classicist, "An intellect properly disciplined, an intellect properly habituated, is an intellect able to operate well in all fields."[2] Since, according to Mortimer Adler, another classicist, truth is final and absolute, "the ultimate ends of education are the same for all men at all times and everywhere. They are absolute and universal principles."[3] According to this view, education is entirely a matter of mind training, and, in Hutchins' words, "we may leave experience to other institutions and influences . . ."[4] The sole purpose of the school is to transmit and promote metaphysical truth, the significance of which is not supposed to emerge until adulthood.

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[2]R. M. Hutchins, *The Higher Learning in America* (New Haven, Conn.: Yale Univ. Press, 1936), p. 63.

[3]M. J. Adler, "In Defense of the Philosophy of Education," in National Society for the Study of Education, Forty-first Yearbook, Part I: *Philosophies of Education*, ed.; J. S. Brubacher (Chicago: Univ. of Chicago Press, 1942), pp. 197–249.

[4]Hutchins, p. 69.

In commenting upon the fundamental fallacy in such a learning theory, Alfred North Whitehead has written as follows:

> With good discipline, it is always possible to pump into the minds of a class a certain quantity of inert knowledge . . . . But what is the point of teaching a child to solve a quadratic equation? There is a traditional answer to this question. It runs thus: The mind is an instrument, you first sharpen it, and then use it; the acquisition of the power of solving a quadratic equation is part of the process of sharpening the mind. Now there is just enough truth in this answer to have made it live through the ages. But for all its half-truth, it embodies a radical error which bids fair to stifle the genius of the modern world. I do not know who was first responsible for this analogy of the mind to a dead instrument. For aught I know, it may have been one of the seven wise men of Greece, or a committee of the whole lot of them. Whoever was the originator, there can be no doubt of the authority which it has acquired by the continuous approval bestowed upon it by eminent persons. But whatever its weight of authority, whatever the high approval it can quote, I have no hesitation in denouncing it as one of the most fatal, erroneous, and dangerous conceptions ever introduced into the theory of education. The mind is never passive; it is a perpetual activity, delicate, receptive, responsible to stimulus. You cannot postpone its life until you have sharpened it.[5]

IV

A second conception of intellectual discipline is that it consists in *a rigorous mastery of the rules of formal logic as a means for the resolution of problems.* Among adherents of this point of view are the scholastics, Aristotelians, and formal logicians. At the heart of this method of reasoning was the syllogism, which usually began with an authoritative or generally accepted premise, under which was placed a specific statement, and which then proceeded to a logical conclusion. This method was employed to advantage by medieval schoolmen, whose concern was to perpetuate orthodox canons of belief and to discourage the emergence of revolutionary or heretical views. As stated in the *Ratio Studiorum* of 1599:

> Even in matters where there is no risk to faith and devotion, no one shall introduce new questions in matters of great moment, or any opinion which does not have suitable authority, without first consulting his superiors; he shall not teach anything opposed to the axioms of learned men or the general belief of scholars.[6]

Needless to say, such a system resulted more in continually reaffirming conventional creeds than in anything like fresh or vital modes of inquiry. In fact, honest inquiry was virtually impossible, for such a system required that the premises of logic consist of a proposition already firmly established by traditional outlooks. Since no new conclusions could emerge, intellectual discipline consisted largely in mastering the rules of logic, rather than in questioning or inquiring. As Francis Bacon has stated it, "The present system of logic rather assists in confirming and rendering inveterate the errors founded on vulgar notions, than in searching after truth; and is therefore more hurtful than useful."

Another characteristic of formal logic has been its analytic attempt at the segregation of elements, often phrased in symbolic terms, to the neglect of a proper recognition of the altered role of elements when assimilated in contexts. In attempting to be analytic the logical process too often became merely mechanistic.

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[5] A. N. Whitehead, *The Aims of Education and Other Essays* (New York: Macmillan, 1929), pp. 8–9.

[6] *Ratio Studiorum* (1599), in E. A. Fitzpatrick, *St. Ignatius and the Ratio Studiorum* (New York: McGraw-Hill, 1933), p. 151.

The educative process defined in purely "logical" terms, for example, might include such factors as teacher, pupil, subject matter, purpose, and so on; but a grave error is committed when it is assumed that the mere presence of these several elements automatically results in learning. Professor C. J. Ducasse's recent analysis of an educational situation may serve to illustrate the point:

> Education is activity of one or another particular kind A, by a person T (teacher); activity A being motivated by T's desire to cause in a person P (pupil)—who may or may not be the same person as T—a response of kind R, which T believes will immediately or eventually result in acquisition by P of some capacity C which T desires P to acquire; activity A being shaped by T's belief (i) that the existing circumstances are of a certain kind S; and (ii) that, under circumstances of kind S, activity of kind A by T would more or less probably cause or contribute to cause directly or indirectly in P acquisition of the desiderated capacity C.[7]

This is an excellent example of analysis as applied to the educative process. The statement is abstract and technical, as most logical analyses are. It attempts to tease out the several ingredients involved in learning, the assumption apparently being that the juxtaposition of these separate factors is all that is required for learning to take place. But no competent teacher guides learning in such terms. If he attempted to do so his endeavors would be limited to a mechanical process of sheer indoctrination. In Professor Ducasse's statement what provision is made for the exchange or interchange of ideas? What recognition is made for the emergence of problem or even novel situations? What importance is attached to pupil initiative? And what regard is taken of the nature, interests, or aptitudes of the learner? It is significant to recognize, also, that the only activity mentioned is lodged with the teacher, while the key words describing the role of the pupil are "response" and "acquisition." What Professor Ducasse's statement actually says is that education is a one-way street. So conceived, teaching becomes a simple device whereby the teacher gives and the learner receives. If learning were a mere matter of absorption or osmosis, if pupils were not very different from sponges, this should be an excellent method of teaching and a first-rate analysis of the educative process. But if pupils are to be regarded as sensitive and intelligent persons, some better analysis of the learning process needs to be found.

V

A third conception of intellectual discipline is that it involves *a rigorous following of intuitive bents, "hunches," or insights.* Subscribing to this notion of education are the subjective idealists and the intuitionists. Such an approach is almost the antithesis of objective analysis, for it is neither objective nor analytical. It follows the spirit of Pascal's remark that "the heart has reasons of its own which the head can never understand." A similar sentiment was voiced by Emerson when he wrote, "Nothing is at last sacred but the integrity of your own mind. Absolve you to yourself and you shall have the suffrage of the world." In speaking of the intuitional nature of values William Ernest Hocking writes:

> Inasmuch as values have to be discovered, the attitude of the individual toward them must be dogmatic; he finds them so . . . . When one sees a value, he sees it. He can neither doubt it nor prove it; he can only report it. Since value has to be felt, all that

[7] C. J. Ducasse, "On the Function and Nature of the Philosophy of Education," *Harvard Educational Review*, XXVI, Spring, 1956, pp. 103–111.

one can say about it is, "I feel that; I am sure that is good." So at bottom instruction in value needs to be authoritative.[8]

The difficulty here is that, without standards or norms that are objectively verifiable, and with only intuition to guide us, almost any point of view can be justified. While conviction and sentiment have much to recommend them when disciplined by experience, they lodge us in strange predicaments when they fail to take experience into account. A marriage based upon intuition instead of sober judgment, or automobile driving according to "hunches" instead of the rules of the road, is seldom associated with intelligent behavior. To consider intellectual discipline as resting upon such premises could come close to inviting social disaster.

VI

A fourth conception of intellectual discipline is in terms of *a rigorous search for truth in a transcendental realm*. Included in this category are the transcendentalists, objective idealists, and metaphysical realists. Whereas the intuitionist believed that we should look inward and examine our own bosoms, so to speak, the transcendentalist would have us look outward to a metaphysical world of spiritual fixity. Both make a studied attempt to circumvent experience. Liston Pope, a contemporary transcendentalist, holds that". . . there must be objective references beyond human desires or social relations, in order to validate the goodness of one's preference or to establish binding standards of moral obligation."[9]

But the same difficulty is encountered here as in the case of intuition. Once an attempt is made to move outside experience the problem of how to validate the good and the true immediately arises. Epistemically, the question of what transcendent reality consists of inevitably has to be reduced to what is known about it. And if we are speaking of what is knowable, then we are back in experience again, despite any claim to the contrary.

Since transcendentalists disagree among themselves as to what constitutes ultimate reality, it will scarcely do to speak of transcendentalism as offering "objective references beyond human desires or social relations." Moreover, the satisfaction of intellectual curiosity—the need to know—is itself basically a human desire; and if morality is fundamentally a social or civilized product designed to enhance and enrich man's relations with his fellow man, it would be a strange kind of morality that ignored or sloughed off as irrelevant man's social obligations or human relations.

What the transcendentalist does, apparently, is to set up a realm beyond experience and knowledge which he then claims to be somehow experienceable and knowable. We are told, in effect, that we can experience the inexperienceable, or know the unknowable. This begins to take shape as a first-rate dilemma. For either what is claimed to be transcendental is actually empirical—since it can be known and experienced—in which case it does not transcend experience, after all; or, if it is truly transcendental—actually beyond experiencing and knowing—then of course it becomes inexperienceable and unknowable, in which case no discussion

[8]W. E. Hocking, "Can Values Be Taught?" in Conference of Universities, *The Obligation of Universities to the Social Order* (New York: New York Univ. Press, 1933), pp. 332–350.

[9]Liston Pope, "Social Contexts of Personality," in *Moral Principles of Action*, ed. R. N. Anshen (New York: Harper, 1952), pp. 140–146.

of such a realm in intelligible terms is possible. Rather than discard the conception altogether it might be retired on an honorable pension and reserved for those with an incorrigible hankering for metaphysical calisthenics.

VII

In the fifth place, intellectual discipline may be thought of as *a rigorous adherence to the proposition that knowledge derives from an objective observation of descriptively delineable phenomena.* Among those so oriented are the operationalists, some phenomenologists, the physical realists, and the logical positivists (or logical empiricists, as they frequently prefer to be called). The intention here is to attain the highest degree of strictly scientific objectivity possible. In the thinking of Herbert Feigl,

> It has become imperative to abandon the dogmatic, other-worldly, supernaturalistic, tender-minded, rationalistic, parochial preconceptions and to replace them by critical, worldly, naturalistic, fact-minded, empirical, experimental, and universally applicable ways of thinking.[10]

In dealing with phenomena an attempt is made to delete the subjective, the interpretive, and the metaphysical, and to communicate instead in purely descriptive terms. Sociology, psychology, political science, economics, and other so-called social sciences are not, from this point of view, to be considered truly objective. Even biology is viewed with some misgivings, for it harbors considerable speculation. Physics and chemistry come closer to being purely descriptive. Only in mathematics, however, do we reach the acme of true science and, also, of true art. As Bertrand Russell sees it, mathematics possesses "not only truth but supreme beauty—a beauty cold and austere, like that of sculpture, without any appeal to any part of our weaker nature, without the gorgeous trappings of painting or music, yet sublimely pure, and capable of a stern perfection such as only the greatest art can show."[11]

Almost existentialist in its overtones, positivism would shear away the humanly imposed meanings, the arbitrary orderliness, the "nice" classifications, the metaphysical purposes, the symbolic structures, the religious systems, and the historic scientific categories that man has obtruded upon the phenomenal scene and would instead describe existence—human and otherwise—as it actually is—without aim and without purpose. One of the most arresting statements in this regard has been made by Russell:

> That Man is the product of causes which had no prevision of the end they were achieving that his origin, his growth, his hopes and fears, his loves and his beliefs, are but the outcome of accidental collocations of atoms . . . that all the labours of all the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system; that the whole temple of Man's achievement must inevitably be buried beneath the debris of a universe in ruins—all these things, if not quite beyond dispute, are yet so nearly certain, that no philosophy which rejects them can hope to stand.[12]

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[10]Herbert Feigl, "Aims of Education for Our Age of Science: Reflections of a Logical Empiricist," in National Society for the Study of Education, Fifty-fourth Yearbook, Part I: *Modern Philosophies and Education*, ed.; J. S. Brubacher (Chicago: Univ. of Chicago Press, 1955), pp. 305–341.

[11]Russell, *Mysticism and Logic* (New York: Longmans, Green, 1918), p. 60.

[12]*Ibid.*, pp. 47–48.

Conceived in such terms, intellectual discipline amounts to a conscious effort to take away meaning from life in a desperate attempt to see things "as they are." In attempting to get rid of the arbitrary, the superfluous, and the distorting, however, there is serious risk of getting rid of all there is. We are apt, as it were, to throw out the baby with the bath. It might be wiser to recognize that, while meaning may begin and end with man and be a stranger to the universe, yet meaning is the only intelligible vehicle by which man can reflect—it is the only *modus operandi* by which even description is possible. A statement by John Dewey on the relationship between meaning and existence may clarify the point:

> It is commonplace that physically and existentially man can but make a superficial and transient scratch upon the outermost rind of the world. It has become a cheap intellectual pastime to contrast the infinitesimal pettiness of man with the vastnesses of the stellar universes. Yet all such comparisons are illicit. We cannot compare existence and meaning; they are disparate. The characteristic life of man is itself the meaning of vast stretches of existences, and without it the latter have no value or significance. There is no measure of physical existence and conscious experience because the latter is the only measure there is for the former. The significance of being, though not its existence, is the emotion it stirs, the thought it sustains.[13]

Even were it assumed that the cosmos has no inherent purpose, that man's religions, sciences, arts, and philosophies are but human inventions, the fact yet remains that humanly devised ways of looking at things or of approaching existence constitute man's only significance. In brief, the corollary of phenomenal meaninglessness is not simply the futility of man, but, on the contrary, the obligation of man to formulate values that will serve him well and guide him competently in the only world he can know—the world of human experience.

VIII

A sixth and final understanding of intellectual discipline is in terms of *a rigorous inquiry into past and present experience for the purpose of intelligently directing the course of future experience.* Here are included the pragmatists, the instrumentalists, and the experimentalists. Intellect in the pragmatic outlook is neither reified nor degraded but is viewed as one of the most significant products in the evolutionary development of man. The gradual emergence of consciousness and conceptualization, along with the appearance and growth of language, provided the raw material upon which thinking is predicated. The intellect of man is regarded, not as artificial or non-natural, but as one among many activities which it is of the nature of man to engage in.

Strongest in its epistemic emphasis, pragmatism affords little satisfaction to those armed with metaphysical and other non-natural claims to truth. It is not a "comfortable" philosophy, wherein truth, once established, is considered closed to further revision, modification, or refinement. It does not constitute a body of fixed principles, which, once mastered, precludes any need of further inquiry. Pragmatism holds, on the contrary, that continual inquiry into the problems of men as they habitually seek better ways of inquiring, knowing, and living is a more worthy endeavor than speculation about worlds remote from the scene of human affairs. For this reason methods of knowing demand a fundamentally reconstructed approach to human issues—an approach far different from the traditional me-

[13]John Dewey, *Intelligence in the Modern World*, ed. Joseph Ratner (New York: Random House, 1939), p. 248.

thods of acquisition and application. As a student once remarked to William James, "I cannot understand your philosophy, Mr. James. When I studied philosophy we were required to commit it to memory."

The intellectual discipline of pragmatism consists in continual and critical probing, wherein the inquirer is bound to view every truth-claim as a hypothesis-to-be-tested rather than as an unexaminable conclusion. When the results of testing consistently and repeatedly fail to validate a hypothesis, then it must be rejected as false. When the hypothesis tests out favorably, when the facts of experience support it, then it becomes a tentative "truth," yet never closed to further inspection as new conditions arise and as better methods of inquiry are developed. The inquirer is morally bound to abide by the findings of his testing until such time as they may be refuted or amended by the appearance of later evidence. Such method requires a discipline of the severest kind—so much so that, by contrast, other methods appear slipshod, careless, and devoid of discipline in the full meaning of the term. The pragmatic discipline is a discipline, not of conformity to a status quo—past or present—but of accounting for the authority of whatever choices are made and of taking into account likewise the social and moral consequences to which choices may lead.

In pragmatism ideas do not lie idle and immutable as metaphysical entities, but are plans of action. They denote conduct in its incipient stage—an intention to behave in a specific way. Ideas are important because they represent both the residue of past experience and the means for shaping up a plan of future experience. In the words of Dewey:

> The experimental method of science attaches more importance, not less, to ideas as ideas than do other methods. . . . The method of intelligence manifested in the experimental method demands keeping track of ideas, activities, and observed consequences. Keeping track is a matter of reflective review and summarizing, in which there is both discrimination and record of the significant features of a developing experience. To reflect is to look back over what has been done so as to extract the net meanings which are the capital stock for intelligent dealing with further experiences. It is the heart of intellectual organization and of the disciplined mind.[14]

It is unthinkable in Dewey's outlook to hold that inquiry should be limited to things physical and not be permitted to operate in the sphere of ethics and values. In commenting upon what he considers an illicit dichotomy between the scientific and the moral, Dewey has written:

> . . . I became more and more troubled by the intellectual scandal that seemed to me involved in the current (and traditional) dualism in logical standpoint and method between so-called "science" on the one hand and something called "morals" on the other. I have long felt that the construction of a logic, that is, a method of effective inquiry, which would apply without abrupt breach of continuity to the fields designated by both of these words, is at once our needed theoretical solvent and the supply of our greatest practical want.[15]

This same general outlook is supported by Albert Einstein, who believes that methods of inquiry and validation are as applicable to ethical and moral matters as they are to scientific and physical questions. On this point he has written as follows:

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[14]Dewey, *Experience and Education* (New York: Macmillan, 1938), p. 109.

[15]Dewey, "From Absolutism to Experimentalism," in *Contemporary American Philosophy*, ed. G. P. Adams and W. P. Montague (New York: Macmillan, 1930), I, 13–27.

> For pure logic all axioms are arbitrary, including the axioms of ethics. But they are by no means arbitrary from a psychological and genetic point of view. They are derived from our inborn tendencies to avoid pain and annihilation, and from the accumulated emotional reaction of individuals to the behavior of their neighbors.
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> It is the privilege of man's moral genius, expressed by inspired individuals, to advance ethical axioms which are so comprehensive and so well founded that men will accept them as grounded in the vast mass of their individual and emotional experiences. Ethical axioms are found and tested not very differently from the axioms of science. . . . Truth is what stands the test of experience.[16]

Perhaps the most significant contribution of pragmatism to an understanding of intellectual discipline lies in its shift in emphasis from *acquiring* to *inquiring*. The former method entailed not much more than the imposition of acquired past solutions upon contemporary problems. It was largely empirical. Pragmatism may be regarded as an extension of historical empiricism in that, while it utilizes past experience, it is not circumscribed by it; it stresses the possibilities rather than the limitations of human action. It does more than require a repetition of antecedent experience; it provides ways for controlling the course of subsequent experience.

IX

The whole point of the foregoing discussion would be lost if we failed to recognize that each of these theories of intellectual discipline represents a value system, and that the values to which we subscribe have a way of influencing our educational and cultural destinies. This is particularly true of our present era, wherein the older sanctions are gradually disappearing and newer values are but seen through a glass darkly. It has become commonplace to characterize our present era as an age of anxiety. It is an age of anxiety because it is a time of flux and transition, and an unstable equilibrium is difficult to maintain. The transition we are experiencing is not quite understood, which makes the problem of deciding which way to go exceedingly complex. For most of us transition simply means change, and change is regarded as a necessary condition of progress. Moreover, we tend to identify change almost exclusively with material advancement. We think immediately of the strides we have made in mass media of communication and transportation, and as evidence we summon to mind the radio, television, and the three-dimensional movie; or new depths of submarine exploration, flights into the stratosphere, and ultrasonic travel.

What is not so commonplace is a grasp of the precise nature of the changes that are taking place, together with a recognized need for some rather careful reflection before charting our prospective course. This is another way of saying that the transitional character of our time goes deeper than the rather obvious changes in the physical scene—higher-powered automobiles, taller buildings, improved standards of health, and the like. It is bound, sooner or later, to raise the question of choice between competing sets of value. To put it differently, evidences of material progress are basically surface indications of an increasingly experimental outlook, the import of which is that progress consists in progressively gaining control over social situations for purposes of human betterment. In opposition to this view is the contention that the status quo ought not to be disturbed and that man's role

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[16]Albert Einstein, "The Laws of Science and the Laws of Ethics," in *Readings in the Philosophy of Science*, ed. Herbert Feigl and May Brodbeck (New York: Appleton-Century-Crofts, 1953), pp. 779–780.

should be that of conforming to some set of fixed principles, which have been variously defined as classical, revealed, transcendental, cosmic, or otherwise absolute and inviolable. From the latter standpoint, those who would invade the established order of things, if not rank heretics, are at least persons whom we should "keep an eye on," and those who would presume to match their wits against nature had better "watch their step."

Science has made such startling advances in respect to man's ability to manipulate natural forces—in medicine and psychiatry, in nuclear fission and astrophysics—that those accustomed to viewing human destiny as foreordained and not to be tampered with are dismayed to find their moorings being loosened on all sides. Today we stand at a crossroads—educationally, morally, socially. For better or for worse, the older sanctions are being seriously challenged, and it is becoming increasingly evident that we must move either forward or backward.

The absolute or traditional point of view demands stress on conformity and uniformity, the pragmatic or progressive on inventiveness and creativity; the former implies adjustment to things "as they are," the latter involves reconstruction and improvement of conditions in terms of what is possible. The former reminds us of our perennially imperfect state and at the same time holds before us a vision of perfection; the latter reminds us of our virtually limitless powers for betterment and bids us construct goals that are attainable. The former perpetuates the dichotomy between the cultural and the practical, while the latter holds that the practical can be cultural and that the cultural can be practical.

X

If the course we decide upon is to determine moral and social trends for some time to come, then there is reason for attaching concern to the problem of what procedure had best be followed. If the decision is to be intelligent then it must likewise be critical. That critical inquiry may on occasion lead to disturbing conclusions needs to be understood at the outset. As Dewey has remarked:

> . . . if we once start thinking no one can guarantee where we shall come out, except that many objects, ends and institutions are doomed. Every thinker puts some portion of an apparently stable world in peril and no one can wholly predict what will emerge in its place.[17]

Yet the conventions of today were the heresies of yesterday, just as the revolutionary thinking of today will become the orthodox conclusions of tomorrow. Thinking is for the "tough-minded," the strong, and the free, and it is as frightening as it is liberating. In the words of Russell:

> Men fear thought as they fear nothing else on earth—more than ruin, more even than death. Thought is subversive and revolutionary, destructive and terrible; thought is merciless to privilege, established institutions, and comfortable habits; thought is anarchic and lawless, indifferent to authority, careless of the well-tried wisdom of the ages. Thought looks into the pit of hell and is not afraid. It sees man, a feeble speck, surrounded by unfathomable depths of silence; yet it bears itself proudly, as unmoved as if it were lord of the universe. Thought is great and swift and free, the light of the world, and the chief glory of man.[18]

[17]Dewey, *Intelligence in the Modern World*, p. [v].
[18]Russell, *Why Men Fight* (New York: Century, 1916), pp. 178–179.

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AMERICAN INFLUENCE ON ENGLISH EDUCATION: 1824-1870

BY W. H. G. ARMYTAGE

MUCH ATTENTION HAS HITHERTO BEEN PAID TO THE INFLUENCE EXERCISED BY EUROPE ON AMERICAN EDUCATION, but little to the reciprocal influence by America on Europe. Professor Hinsdale, of the University of Michigan, set the tone of the first type of study some sixty years ago[1] and he was followed by such authorities as C. R. Thwing.[2] Of recent years, however, the mood has changed, and there has developed a growing awareness of the influence exercised by American ideas and practices on Europe.[3] The present study, part of a wider survey, illustrates the direct funnel for their transfer into Europe. Nothing has been said of the influence of America as a laboratory for social experiment since it is a theme recently explored by Professor A. E. Bestor of the University of Illinois in his book, *Backwoods Utopias*.[4]

I

One could perhaps begin with the pervasive influence of the Philadelphian Prometheus, Benjamin Franklin[5]. But the precise month which registers the impact of the American educational ethos on England was October, 1824, when thirty four year old Francis Gilmer arrived in London as a talent scout for Jefferson's new university of Virginia. Gilmer distributed amongst his hosts, who included Lord Brougham, Leonard Horner, George Birkbeck, Major Cartwright and Thomas Campbell (the very group who were, three years later, to establish England's first non-sectarian university) copies of the *Rockfish Gap Report*. This blue print of a university free to students of all denominations was something quite new to English educational reformers, most of whom had been content either to campaign, in a rather half-hearted way, against the religious tests which made Oxford and Cambridge preserves of the national church; or to compromise with injustice and send their sons to Scottish or European universities.

The *Rockfish Gap Report* aroused great interest amongst Gilmer's English friends. Thomas Campbell's father was in the Virginia trade, his elder brother was living in Richmond and another brother had married the daughter of Patrick

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[1]B. A. Hinsdale, "Notes on the History of Foreign Influence upon Education in the United States," in *Report of the Commissioner of Education for the year 1897-98* (Washington, 1899), 1, pp. 591–632.

[2]C. F. Thwing, *The American and the German University* (New York: The Macmillan Co., 1928).

[3]See W. H. G. Armytage, *A. J. Mundella 1825–1897: The Liberal Background of the Labor Movement* (London, 1950), pp. 88–91; *Thomas Hughes, The Life of the Author of "Tom Brown's Schooldays"* (London, 1953), pp. 174–195, 227–250. See also A. V. Judges, editor, *Pioneers of English Education* (London: Faber & Faber, 1952), pp. 207–8.

[4]A. E. Bestor, *Backwoods Utopias* (Philadelphia: University of Pennsylvania Press, 1950).

[5]For his influence on the development of scientific education in England, see my book, *Civic Universities: Aspects of a British Tradition* (London, 1955).

Henry. And, as the most recent and authoritative historian of University College, London, has said: 'Here, in the person of Gilmer, was a fellow in the new faith, and what was more, a witness to the practicability of what men said was a dream. That which was done at Charlottesville could surely by done in London."[6] It was, for when the University of London was founded in 1827, no religious test barred students from entering, and, even after the establishment of the new University of London in 1827 on Jeffersonian lines, it stimulated those who were working for other universities in other parts of England. Thus James Yates, later to be the first secretary to the Council of the British Association for the Advancement of Science, pleaded very powerfully for universities in the North and West of England which should be untrammelled by sectarian tests. Yates was aware certainly of the Jeffersonian influence.[7]

Yates marks the orientation towards America of the intellectual antennae of the great industrial north of England. Thanks to the steady and increasing flow of transatlantic travellers' reports, the sneers of a Mrs. Trollope or the exclamations of Basil Hall were, in the course of time, blanketed by the sheer weight of testimony favourable to American education. And in this weight, the oblique influence of such American observers of England as Griscom and Horace Mann can be discounted. For to begin with Griscom and Mann were not only 'foreigners' but they were, 'educationalists' and many literate Englishmen shared the prejudices of Dr. Opimian in Peacock's *Gryll Grange* who remarked "The bore of all bores was the third. His subject was education. Never was their such a journey through the desert of mind, the great Sahara of intellect. The very recollection makes me thirsty." Literate Englishmen preferred to read about America in the works of army officers, naval captains, politicians, scientists, novelists, and journalists, (the order is not arbitrary) and it is to their opinions that we must now turn.

II

Nearly 300 British visitors published accounts of their travels in the United States during this period. Many of them, though not predisposed to favour the country, bore witness to its educational achievements. Wherever possible, the *Edinburgh Review* (which Sydney Smith, Lord Brougham and Leonard Horner had founded) bore their good witness to a wider public. Thus Sir Charles Lyell, the famous geologist, after visiting a girls' school in Boston, confessed, after examining it, that he could not have expected more in an English public school.[8]

The main feature of the American system, as opposed to the English, was its public, non-sectarian character. New York was especially admired. James Silk Buckingham,[9] the organizer of Whig publicity in the early thirties, wrote that its

[6]Hale Bellot, *University College, London* (London, 1929), p. 16.

[7]James Yates, *Thoughts on the Advancement of Academical Education in England* (London, 1827), pp. 44–5, 145. B. A. Hinsdale, *op. cit.*, pp. 598–9, is concerned with Jefferson as "a propagandist of French science, arts and educational ideals."

[8]Sir Charles Lyell, *Second Visit to the United States* (London: J. Murray, 1849), 1, p. 189.

[9]James Silk Buckingham, *America* (London: Fisher, Son & Co., 1841), 1, pp. 203–4. Buckingham was not only a pioneer town planner in England (Lewis Mumford, *The Culture of Cities* (London: Harcourt, Brace & Co., 1940), p. 394), and the first M. P. for Sheffield, but a pioneer of self-government for the colonies (*Cambridge History of the British Empire* (Cambridge: The University Press, 1940), ii, p. 405). He was also a notable publicist and founded *The Athenaeum*, *The Sphynx* and the *Oriental Herald* and *Colonial Review*.

teachers were better than those employed by the voluntary societies in England, then providing the only elementary education for the masses in England. J. F. W. Johnstone, a Northcountry scientist and university teacher pointed out fourteen years later that the educational budget of New York State alone was larger than that of England whilst that of Connecticut and Rhode Island was even larger.[10]

Philadelphia too, excited admiration. Alexander MacKay, a Scotsman who was employed by the *London Morning Chronicle*, described its 1,660 school districts and 80,000 pupils with admiration in 1850.[11] The young Lord Acton, who held no high opinion of American institutions, kept his thoughts to himself, and did not publish his diary, but even he remarked that teaching positions in Philadelphia were paid so well that it was not uncommon for a minister to renounce his orders in order to teach.[12]

The congruity of opinion could be illustrated *ad nauseam*. Let it suffice to consider the opinion of one of the most widely read English authors—Harriet Martineau, who stayed in the United States for two years (1836–38), and J. R. Godley who visited it in 1842. Miss Martineau was an admirer of America; Godley, a Tory, not so. Miss Martineau said that the provision of schools was so adequate that the only children seen about were truants.[13] Godley confessed himself "astonished" in New York, at the literary proficiency of the negro pupils and their negro teachers, and remarked that their speaking and writing was far superior to that of the English working classes.[14]

The common school excited admiration even from prejudiced observers of the general American scene, chiefly because it enabled those who rose in the social scale not to feel inferior to those they met. Mrs. Bishop in 1854,[15] H. A. Murray in 1855,[16] and T. C. Grattan in 1859,[17] one a young lady, the other a naval captain and the third a former British consul all regarded it as one of the "glories of America".

As for the colleges and universities, they provoked the same mixed feelings as they do today. Condemnations of their narrow vocationalism alternated with praise for their cheapness, and perhaps it is fitting to select the words of a hostile observer, Charles Dickens, whose novel, *Martin Chuzzlewit*, was certainly no advertisement for the Americans, to indicate one strong sentiment they elicited:

> They disseminate no prejudices; rear no bigots; dig up the buried ashes of no old superstitions; never interpose between people and their improvement; exclude no man because of his religious opinions: and above all, in their whole course of study and instruction, recognize a world . . . beyond the college walls.[18]

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[10]J. F. W. Johnstone, *Notes on North America* (Boston, 1851), ii, p. 491. Johnstone was an early teacher of science at the new University of Durham (founded 1832).

[11]A. Mackay, *The Western World* (London: R. Bentley, 1950), iii, pp. 234–5.

[12]J. E. E. D. Acton, "Lord Acton's American Diaries," *Fortnightly Review*, CX, pp. 727–742, 917–934; CXI, pp. 63–83. See CXI, p. 80.

[13]Harriet Martineau, *Society in America* (New York: Saunders & Otley, 1837), ii, p. 269.

[14]J. R. Godley, *Letters from America* (London: J. Murray, 1844), ii, pp. 33–34. He was not so impressed, however, by the conditions of the South.

[15]I. L. Bishop, *An Englishwoman in America*, (London: J. Murray, 1856), p. 436.

[16]H. A. Murray, *Lands of the Slave and the Free* (London: G. Routledge & Co.), p. 377.

[17]T. C. Grattan, *Civilized America* (London: Bradbury & Evans, 1859), II, p. 377.

[18]Charles Dickens, *American Notes* (Boston, 1867), p. 10; written from his experiences in 1842.

One could go on to quote the contents of the numerous reports of British commissioners which, in officialese, said much the same thing, but not quite so effectively. British bluebooks were rarely so widely conned and pondered over in their day and age as they are in ours, and the remarks of George Wallis, Sir Joseph Whitworth, and the Rev. James Frazer have been adequately deployed by D. L. Burn to illustrate the growing awareness, by percipient English observers, that American schools were, as James Frazer said, "channels through which a desire for change and a desire to excel were inculcated."[19]

III

Confirming and illustrating the observations of Englishmen in America were the educational activities of Americans in England during these years. Of the many examples that could be cited, three will perhaps serve: Joseph Chessborough Dyer,[20] Moses Coit Tyler,[21] and Miss Elizabeth Blackwell.[22] The first, Joseph Chessborough Dyer, came to England in 1802, and in 1815 was associated in founding the *North American Review*. Dyer's business was to market American inventions. Up to 1816 he lived in Camden town, London. Perhaps the greatest interest was attached to his attempts to promote Fulton's steam vessel. He "undertook the task of inducing some of the leading capitalists of London" to take a trip on the river Thames in a steam-boat. Dyer possessed Fulton's drawings and lent them out in 1814 for a vessel to be built. He devoted his attentions to the naturalization of other American inventions in England and the list of these was formidable.

After trying to introduce machinery to manufacture banknotes he turned to cotton manufacture, and plunged into the life of Manchester, taking part in most of the radical movements of the times. He made a strenuous and stirring speech against the Corn Laws on July 5, 1827—long before Richard Cobden took up the cause. He spoke at another great meeting when delegates were sent to the new French government after the revolution of 1830. He took an active part in a movement to reform the representative system of the country, advocating the use of the ballot some thirty years before it was actually adopted. He helped the incubation of enlightened opinion all over the north of England by his speeches, and even more by his assistance to societies for higher education. The Manchester Society for the Promotion of Natural History was but one of the local societies which owed much to him. So did the Bank of Manchester founded in 1828. His ideas were refreshingly radical. Apart from his series of anti-slavery tracts addressed to America, his work for the liberalization of English society was profound.

In his *Remarks on Education* published in 1850, he was scathing in his treatment of the English "system, if it may be called so." It was "utterly inadequate to the wants and just requirements of the country, nor have we any hope that it can hereafterwards be made commensurate with the wants of society." He con-

[19]D. L. Burn, "The Genesis of American Engineering Competition 1851–67", *Economic History* (London, 1930), p. 309. James Frazer was serving as a commissioner for the Schools Inquiry Commission, appointed in 1864, to examine the endowed schools in England. For his report see *Report to Schools Inquiry Commission*, 1867, XXVI, p. 496.

[20]W. H. G. Armytage, "American Enterprise in Britain's Industrial Revolution," in *American Journal of Economics and Sociology* (New York, 1955), 14, pp. 193–198.

[21]H. M. Jones, *The Life of Moses Coit Tyler* (Ann Arbor: University of Michigan Press, 1933).

[22]Elizabeth Blackwell, *Pioneer Work in Opening the Medical Profession to Women* (London, 1895).

tinued: "I look on the 'Ragged Schools' as beneath contempt—why insult the poor by calling them ragged. I submit that in a proper and healthy state of society there ought not to be any Sunday Schools for *secular* teaching." His theory of crime was that the poor were incited to it "by witnessing superflux."

In his tract on Democracy *What is it? Let us inquire*, (1859) he showed that he was still American at heart: "far from apprehending mischief from the increasing democratic influences amongst us here, I look upon their spread, and fair change of ultimate ascendancy in the councils of the country, as being fraught with the most salutary consequences to the public welfare of the entire *British Nation*."

There remains a touch of prophecy about his opinion:

> England, at no distant day, will find herself compelled to act in concert with despotic rulers and thus aid the general enthrallment of European nations—which God forbid she ever should!—or else she must be prepared to meet the combined hostility of rulers. In such an event, as sure as fate in its approach the American States cannot afford to look on and see England fall beneath such gigantic forces as enslaved Europe may bring upon her; and therefore, the United arms of England and America will form the only shield to human freedom left in the wide world, and they must be so united for their mutual honour and safety.[23]

The second, Moses Coit Tyler, arrived in England on 5th May, 1863, a twenty eight year old ex-clergyman. Failing health and a dissatisfaction with orthodox theology had led him to attend a gymnasium in Boston, where by swinging dumb-bells to music and throwing bean bags at the wall he recovered his health and mental equilibrium. Indeed, he discovered his mission—to be a saver of bodies rather than souls: a physical educationalist. So much so that he wrote to his uncle "perhaps for a year or so I might devote myself to this new profession of physical culture. Dr. Lewis is anxious that I do." Dio Lewis, his mentor, had fashioned the right combination of motives in his exercises. They combined fun with hygiene, aesthetics with moralizing. They were nineteenth century tribal dances. They were for saints and would-be saints, and the redemption of sinners. They were therapeutic theology in practice. They carried Calvinism into the gymnasium, and were buttressed by a hagiology which included Seneca, Bacon, Salzman, Emerson, Lawrence Stern and Tom Hughes.

It was Thomas Hughes' book *Tom Brown at Oxford* which made such a powerful impression on Tyler that he decided to come to England. Having arrived, he took up lodgings in the Strand at 11 Craven Street, with a Mrs. Henley, and was given a party by some London doctors where he was able to explain his system. Encouraged by this, he founded the London School of Physical Education and within two months of his landing he was drawing large audiences (which included Elihu Burrit and Mrs. Barrie Inglis) to watch boys from the Hollywood School, Brompton, exercising according to his, or Dr. Lewis', system.

He was no charlatan, and the College of Preceptors realized this when they invited him of 7th March the following year to lecture to them. He chose as his title "A New System of Musical Gymnastics as an Instrument in Education," and so pleased were his auditors that he was elected to membership of the college. Afterwards he spoke before health specialists, doctors, scientists, groups like the Royal Polytechnic Institute, Literary Societies and Mechanics Institutes with great success. W. B. Hodgson (1815–1880) the famous English Educational re-

[23]May F. Eastham, *Biography of Dio Lewis* (New York, 1891).

former, avowed that he had 'never listened to a lecture with which he was more pleased'. Provincial papers too, were impressed, and the *Liverpool Albion* on 21 December, 1836, wrote that they "hoped to hear of an extension of this system."

Tyler had influential allies. One of them was Moncure Conway, a great friend of Herbert Spencer. Others ensured that his tour of Western England and Wales —undertaken in January, 1866—was a great success.

Distinguished Americans looked him up in London—notably Louisa M. Alcott, whom he piloted about London, and later described as a "jolly Yankee girl, full of the old nick." In 1866, he returned to America, where he later became a professor at the University of Michigan.

The importance of Tyler's crusade for the eurhythmics of Dio Lewis during the period 1863–1866 cannot be underestimated. For it was a time when, owing to the war scare, military gymnastics were the rage: the establishment of military drill at the public schools dates from 1860, whilst the following year army gymnasia were established at Aldershot, Chatham, Portsmouth, Woolwich and Skegness. And, since military gymnastics required poles, bars, vaulting horses, rings and ladders to say nothing of drill sergeants, where such amenities were not available the simple eurhythmics of Tyler proved eminently acceptable to the lower classes of the large towns: the very people upon whose fitness the nation depended.

By 1867 Moses Coit Tyler's apostolate for Dio Lewis' musical gymnastics had been so effective in the schools themselves that a commissioner for the Taunton Commission (appointed in 1864 to examine the working of endowed schools in England) reported that they provided a better solution to the problem of providing physical education than any of the other practices.[24] And that, from a crown commissioner, was praise indeed.

The last of these American pioneers in England was Elizabeth Blackwell, the first American woman to be graduated from a medical college (Geneva, New York 1849). In England she met Elizabeth Garrett who, fired by her example, began to study medicine herself in 1859, but was refused permission to take the matriculation examination by the University of London. This led Emily Davis to found the Committee for securing the admission of women to university examinations, from which the whole agitation that ultimately opened the universities to women derived much support. And in that agitation, many of the women flexed their strength by playing net ball and lacrosse: both American importations.

IV

The most effective political exponent of the American idea in England during the period 1835–1865 was Richard Cobden. Unjustly described by Carlyle as 'an inspired bagman with a calico millenium,' Cobden early was the threat to British industrial supremacy embodied in America and in a pamphelt, published in 1835, wrote,

> It is from the West rather than the East, that the danger to the supremacy of Great Britain is to be apprehended; that is, from the silent and peaceful rivalry of American commerce, the growth of its manufactures, its rapid progress in internal improvements,

[24] *Report of the Schools Inquiry Commission* (H. M. S. O. London, 1867), Vol. VII, Appendix XII, pp. 587 ff.

> the superior education of its people, and their economic and pacific government—that is from these, and not from the barbarous policy and impoverishing armaments of Russia, that the grandeur of our commercial and national prosperity is endangered. And the writer stakes his reputation on the prediction that, in less than twenty years, this will be the sentiment of the people of England generally: and that the same conviction will be forced upon the government of the country.[25]

During his visit to America in that year he confided to his diary a resolution (unpublished until 1950) generated by the sight of an American school.

> Oh happy sight, pregnant with the hopes of the exaltation of the character of future generations. I hereby dedicate myself to the task of promoting the cause of the infant school in England where they may become an instrument for ameliorating the fate of children working in the factories whose case I fear is beyond the reach of all other remedies.[26]

On his return to England in 1836, Cobden held a meeting in his country house at Manchester. To it came ministers of religion of every denomination. In an endeavour to initiate "a system which it was proposed to try to agitate," Cobden used all his energies.[27] But sectarian animosities proved too strong, and Cobden turned to the task which made his political name: the repeal of the Corn Laws.

When he returned to this educational crusade it was to encourage the Lancashire Public School Association (formed in 1847) to become the National Public School Association. He spoke powerfully and often on its behalf, both in the House of Commons and outside. On 22nd January 1851, he said at Manchester,

> Where is our boasted superiority, when the American minister can come to the Town Hall here, and taunt us with the ignorance of our people and when nobody dares to rise up and say, we have done as much for education as they have in America.[28]

He followed this on May 22nd by telling the House of Commons (W. J. Fox's Education Bill had just been rejected by 139 votes to 49):

> What I want is to have the same system of education in England that they have in Massachusetts, in the United States of America. I will not go to Louisiana or Georgia, but my system is that of Massachusetts, and I challenge the Hon. Gentlemen to test that system by the experience of that State and the good it has effected there. . . . Where is the difficulty of our doing what has been done in Massachusetts. I will not be driven from that ground. Give me the Massachusetts plan. I declare my belief that the mass of the people in Massachusetts are as superior in intelligence to the population of Kent, as the latter are to the people of Naples. I say this advisedly. I ask, then, why we cannot have this system in England?[29]

On December 1, 1851, he told the National Public School Association:

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[25] *England, Ireland and America* (London: Simpkin, 1835), by a Manchester Manufacturer (i.e., Richard Cobden).

[26] W. H. G. Armytage, "Richard Cobden in Illinois," *Journal of the Illinois State Historical Society*, (Springfield, 1950), XLIII, pp. 187–203. Cobden's interest in education was so well known and regarded that we find Matthew Arnold enlisting his support. See W. H. G. Armytage, "Matthew Arnold and Richard Cobden in 1864: Some New Letters," *Review of English Studies* (Oxford, 1949), XXV, pp. 249–254.

[27] S. E. Maltby, *Manchester and The Movement for National Elementary Education 1800–1870* (Manchester: University Press, 1918), p. 48.

[28] John Bright and J. E. Thorold Rogers, editors, *Speeches on Questions of Public Policy* (London, 1903), p. 596.

[29] *Ibid.*, p. 29.

> We are the worst educated people of any Protestant country in any part of the earth. . . . We are the only people that have had voluntaryism and we are behind all the world. But in the United States they don't trust voluntaryism. They make use of their parochial and their municipal organization to secure a system of schools free to all, paid for by all. . . . All classes are educated at the common public school.

Indeed, the N. P. S. A., as S. E. Maltby has shown, became one of the powerful pressure groups which was responsible for the presentation of almost annual bills before the House of Commons. It was the N. P. S. A. which assisted in the political education of W. E. Forster, of whom more will be said hereafter.

V

It took the cathartic shock of the Paris Exhibition of 1867 to arouse the English as a nation to their need for a national system of education. Censured by *The Times* (then being printed on presses made in Boston), and uncomfortably aware of the silent march of American industrial ingenuity, the manufacturing class gave disturbing evidence to a committee appointed by Parliament to investigate technical education in England. Indeed John Platt, the "largest mechanical engineer in the world," who employed at his works in Birmingham some 7,000 men, told the committee that it was 'the custom among machine-makers in England to purchase inventions from the Americans and adapt them for use in this country.'[30] Others gave startling examples of the need for technical and elementary education.

So, when a new House of Commons, with a large majority of Liberal manufacturers, was elected in 1868, an Education Act was drafted by W. E. Forster. This Act, which virtually established the national system of education as we know it, made provision for the election of school boards on the American model, to supply the gaps uncovered by the existing denomination Schools. And, in the debates on this Act, topics like non-sectarian religious education, compulsion, and local rating, were all discussed with the American example in mind so much so that opponents of such features were almost forced to cite the imperfect working of the American system to further their arguments.[31]

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[30] *Select Committee on Scientific Instruction*, pp. 1867–8, XV, Q 5671.

[31] See, e.g., speech of the Duke of Marlborough on the Second Reading in the Lords in *Verbation Report of the Debate in Parliament during the Progress of the Elementary Education Bill, 1870.* Published by the National Education Union, Manchester, 1870, pp. 524–5.

The author may publish a further article dealing with American influence on Education in England from 1867–1902.

SIX THEORIES OF INTELLECTUAL DISCIPLINE

(*Continued from page 171*)

We are now offered a choice between a reinstatement of absolutism and intellectual tyranny on the one hand and a cultivation of democracy and intellectual freedom on the other. Our century may mark the inauguration of another Dark Age, stifling to the spirit of inquiry; or it may be the beginning of a Second Renaissance, ushering in a new era of freedom. The choice which history will one day record, today rests with us.

APPROACHES TO ETHICAL OBJECTIVITY

BY SIDNEY MORGENBESSER

Introduction

THE RELEVANCE OF ETHICAL CONSIDERATIONS FOR EDUCATIONAL PRACTICE is a matter of general agreement. But the scope and methodology of ethical judgment is a subject of considerable controversy, both popular and philosophical. One of the fundamental points at issue is the possibility of objectivity in ethical judgment. Is such judgment a mere matter of subjective taste, or is it grounded in some non-personal standards? Certain recent thinkers have urged that a theological base is necessary to ground ethical objectivity, while others have sought in the data of perceptual psychology a guarantee of such objectivity. The first and second sections of this paper are devoted, respectively, to a critical analysis of these two trends, while the last sets forth an alternative interpretation of ethical objectivity and applies it to some educational issues.

I

Recent theologians have criticized what they take to be the root error of current philosophy: the denial by philosophers that values are objective. The issue according to the theologians is not simply an intellectual one, and its consequences not simply academic. For according to them unless values are proven to be objective, educational theory is baseless, the central problems of modern man will be intensified, and the drifts towards fascism or communism or both will be accelerated. Since the problem for these men is an urgent one, their refusal to wait for technical philosophers to perform a *volte-face* is at least understandable and their own attempts to prove objectivity by grounding ethics in a theology are at least honorable. But though there can be little doubt of their honor and earnestness, there is much confusion about their claim and program.

In the first place it is hard to know what these men expect from or demand of philosophers. Although none of them is naive enough to assert that philosophical theories are sufficient conditions for major social changes, they do write as if philosophical theories are sufficient conditions for changes in moral language and practice. But this would presuppose that philosophers provide men with a sense and scale of values they otherwise lack. Philosophers however, certainly most current philosophers, restrict their task to a presentation of descriptive theories about ethical discourse and practice; and, as is the case with all theorists, do not create their subject matter. It would be of course naive to assert that ethical analysts do not affect ethical practice and language. German jurists began at least formally respecting law *qua* law after reading Kant, and many American social scientists were sensitized to the interconnection between means and ends after reading Dewey. Moreover philosophers like Socrates, Zeno, Spinoza, and Nietzsche, who did not

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restrict their work to analysis but either criticized the values of their peers or presented causal hypotheses about the genesis of values, had even greater influence. But all this merely refutes the thesis that philosophers are ineffectual angels. It does not establish them as uncrowned legislators, even if we restrict their domain to the realm of the just and the moral.

The second thing to note is that the charge leveled against current philosophers, namely that they have mistakenly asserted that ethics is not objective, is either untrue or unclear. It is untrue if ethical objectivity is taken as the thesis that value statements are cognitive propositions and not simply disguised imperatives or mere expressions of emotion. For philosophers as important and as diverse in approach and procedure as Professors C. D. Broad, R. B. Perry, and C. I. Lewis agree that in this sense, ethics is objective.

On the other hand, the charge is unclear if this catholic usage of 'ethical objectivity' which we have just considered is dropped, and a more restricted one, frequently emphasized by theological writers, is considered. What this more restricted sense is, is never made explicit but it is at least inferrable from their critical remarks hurled at naturalists from Aristotle to Dewey. Again and again these theologians repeat the cryptic dictum of Hume that ethical sentences cannot be deduced from factual ones, and castigate naturalists for attempting to perform that illicit task, i.e. to derive *ethical* judgments from bare scientific factual information. Given this criticism, one may infer that these men (at least on occasion) construe the doctrine of ethical objectivity as implying not only that ethical sentences are cognitive, i.e. true or false, but also nonfactual. Phrases like 'cognitive but nonfactual' or 'true but nonfactual,' however, are obviously puzzling: in the ordinary sense of the words they are absurd while if some special technical sense is to be attached to them, a good deal more explanation is needed. Hence the previous observation that the charge is unclear.

Another word on this issue may be in order. Obviously if a philosopher proposes acceptable definitions of such terms as 'factual' and 'ethical' such that it follows from the definitions that no ethical term is equivalent in meaning to a factual one, an alleged deduction of ethical sentences from factual ones would be fallacious. But it is far from clear whether such definitions have been or can be presented, and till that issue is decided one cannot rest one's moral case upon Hume's dictum. It is only fair to mention that the great naturalists had not thought such definitions impossible; as a matter of fact they attempted to present proofs to the contrary. Hence critiques offered of the naturalists, based on the assumption that such definitions *are* impossible, are beside the point.

I turn now from theological criticisms of ethical naturalists to the implied alternative program of grounding ethics in a theology. By this is meant, I presume, enabling the deduction of ethical sentences from theological ones. It would be very convenient at this point to employ Hume's dictum and accuse this program of committing a fallacy. For certainly theological sentences are factual ones, e.g. concerning the existence and nature of God, and if it is a fallacy to deduce ethical sentences from factual information about human attitudes and needs it is equally a fallacy to deduce them from information about the will of God. But since we are already foresworn from employing Hume's dictum, we must take more pains with the theological program than its proponents frequently take with the program of the naturalists. Success of the theological program depends upon presentation of a

series of definitions of ethical phrases and words in terms of theological ones, for otherwise, as we have already hinted, no deduction of ethics from theology would be achieved. But no such definitions are offered by proponents of this program and no definition that has historically been offered even seems plausible. At best, therefore, the recent theologians have offered us a series of blank checks. Of course, we can interpret them as making the same charge against the naturalists. But unless they produce adequate definitions, the superiority of *their* program is at best a matter of faith.

Two other comments about their program, however, independent of its ultimate success or failure, seem apposite. In discussing the problem of grounding ethics in a theology, they support the notion that moral theory is best presented as analogous to a geometry with one or two ethical axioms being sufficient, given relevant definitions, to deduce all the moral judgments we make. It is upon this small set of axioms that they concentrate when they demand a grounding of ethics. But after the general failure of formalistic rationalism as a philosophy of science, and after the searching criticisms of formalism in ethics given by Dewey and Stevenson, we may be antecedently dubious of the search for such axioms.

Secondly, in light of their program, their comments on the values that men currently entertain are puzzling. These writers frequently insist that, since philosophers have failed to supply a basis for vaules, men are currently adrift and, in some appropriate sense, do not know how to value. But this thesis is coupled with another to the effect that men as men *must* value, and that it is as difficult to find a nonvaluing man as it is rare to find a Spartan philosopher. I do not claim that there is an outright contradiction here. Most likely these critics would offer a distinction between *valuing* and *really valuing*, and insist that while modern men, as all men, must value they don't *really* value. I shall not consider the sociological grounds for this judgment about that vague entity 'modern man.' I emphasize only that it is hard to see the grounds upon which a distinction between values and real values can be made, without at the same time allowing that *many values are not really objective and not grounded.* Once again the simplified theological search for the objectivity of values becomes confusing.

I hope it is clear that in criticizing the account offered by these men about the causes of contemporary unrest, and by taking issue with their simplified version of present day philosophy, I am not asserting that all goes well in current life and thought. The materials for a dirge about our lot are readily available and need not be marshalled here afresh. I trust that it is equally apparent that in questioning the thesis that ethics needs a theological underpinning, I am not denying that there are many relevant *causal* connections between morals and religious institutions—connections which make it impossible to assert honestly and unequivocally Voltaire's plaint that the church is the greatest enemy of progress. But the *causal* relevance of church life is not the basis upon which recent theologians stake their claim; and can therefore be bypassed.

II

Gestalt psychologists like Wertheimer, Köhler, and Asch have attempted to prove that ethics is objective. These men generally restrict their attention to certain qualities which they call either "value-qualities" or (following the felicitous

suggestion of Santayana), "tertiary-qualities" of objects and events. Their proof of the objectivity of ethics rests almost exclusively on the observation that value-qualities are perceived as being, to use their language, *in* the object. The gestaltists observe, and claim that we all observe an object as, e.g. terrifying, threatening, charming, etc., just as we observe an object as colored, solid, or heavy. Their observation is certainly a pregnant one; from it an entire philosophy is developed.

The gestaltists' perceptual doctrine seems cogent enough, and there would be little point discussing it were it not for the consequences they draw. They insist, if I read them correctly, that once we notice that value qualities are really there, we need not be puzzled about the basis of ethics, nor concern ourselves with the problem of the truth or falsity of ethical sentences. For in the same manner in which sentences about colors and shapes are supported by observational reports, ethical sentences are supported by observational reports about the perception of value qualities. The gestaltists' thesis is beguilingly simple; unfortunately, it seems false.

First, a word about the gestaltist emphasis upon 'the objectivity of qualities.' No philosopher who ever denied that value qualities are objective ever denied the phenomenal facts reported by gestalt psychologists. The philosophers presented certain arguments (which in general are developments of the familiar Lockean ones based on the relativity of certain perceptions to the observer) about the nonobjectivity of these qualities usually called "secondary" ones, e.g. color, warmth, smoothness, etc. It is these arguments that have to be met for value or "tertiary" qualities. I do not claim that these arguments cannot be refuted. As a matter of fact, since Berkeley the entire discussion of the objectivity of certain qualities in contradistinction to others seems pointless. For if Berkeley proved anything he proved that Locke's arguments to establish the thesis that *certain* (i.e. "secondary") qualities are non-objective, can be generalized to include "primary" or basic physical qualities, since perception of these is also relative to the particular observer. Given his accomplishment in showing all qualities to be on a par it is as silly for gestalt psychologists to argue that value qualities are *really* objective as it was perverse of Berkeley to argue that they are all *really* mental.

But whatever the truth be about the objectivity or nonobjectivity of qualities, the gestaltists' teachings about values seem of dubious merit, for at least two independent reasons. In the first place, a quality is perceived under certain conditions, and the peculiarly *ethical* problem of deciding *whether to be* under those conditions is bypassed if we are simply informed of the nature of the perceptual experience *once we are there*. Secondly, the gestaltists encounter a difficulty which is reminiscent of one encountered by intuitionist philosophers like Professors D. Ross and A. C. Ewing, whose position may be mentioned in passing. According to the latter, ethical sentences are cognitive, i.e. true or false, not because they are accurate or inaccurate reports of certain qualities which, so to speak, clothe objects, but rather because they are accurate or inaccurate reports of the intuition of certain non-natural qualities, qualities which by their very nature cannot be sensually perceived. But very few other philosophers find themselves intuiting the qualities mentioned and named by these philosophers, and hence most refuse to base an ethic on such nonnatural grounds. Similarly, many people find themselves missing the value-qualities the gestalt psychologists discern with ease. The cakes noticed by Alice had written 'eat me' upon them; the urchins noticed by gestalt psychologists are

gilded 'help me.' But most of us share neither the perceptions of Alice nor those of the gestaltists.

Though gestalt psychologists have therefore not aided us in our quest for an objective basis for ethics, they are among the very few social scientists who have clearly realized that some relatively innocuous generalizations about the influence of groups or the importance of psychological drives cannot be substituted for an analysis of the rational grounds (if any) upon which ethical judgments may be decided and accepted. The bulk of other social scientific writings is generally irrelevant to our interests, because of failure to appreciate just this point.

III

Thus far we have attended in the main to some analyses of the word 'objective' which emphasize primarily the content or subject-matter of ethical sentences. Similar usages of the word 'objective' are found when nonethical sentences are being considered. Thus, it is in accord with common usage to assert that scientific sentences, such Newton's laws, are objective in the sense that they concern phenomena independent of the judger or of any human being. But there is a second sense of the word 'objective' to which we now turn. In this second usage a sentence is considered objective if it is supported by evidence gathered in certain standard ways, and is one which can be agreed to by almost anyone willing to review the evidence in appropriate manner. These standard conditions will vary from domain of inquiry to domain of inquiry and cannot be specified once and for all; neither can the domains in which sentences are used in an objective manner be specified once and for all.

Now consider the domain of ethics and notice the patent fact that there are differences in the care with which support is marshalled for ethical decisions, just as there are differences in the care with which we support scientific judgments. Some may rant and rave, and impose their beliefs either about matters of fact or morals; others may be ready to support their views about the nature of the world or the rightness of certain acts carefully, slowly, considering all the factors and evidence involved. It is this difference in the care with which we support our judgments which enables us to speak of objectivity, in an important sense, both in science and ethics.

No one doubts, upon reflection, that ethical sentences are used on occasion in a careful and considerate manner, but many fail to see any connection between such deliberation and ethical *objectivity*. And indeed there would not be one unless a sense for the phrase 'evidence for ethical sentences' can be stipulated. In view of what we have said in the previous sections, it seems that the evidence for ethical sentences does not and cannot consist of reports of the perception of natural or nonnatural qualities, nor does the evidence consist of an attempted deduction from axiomatic theology or perceptual psychology. What, then, does it consist of?

Attend for a moment to the intent of a person who insists that certain things are right. What does he mean? It seems to me that the person is attempting simultaneously to affirm something about his own approvals, and also to claim that if the person addressed knew of certain factors or if he underwent certain experiences, he would agree with him in attitude. If that is really his claim, then the evidence for the ethical sentence would consist of the probable agreement of the

person addressed—agreement subsequent to the interchange of ideas, views and experience. It is because of this claim that people are ready to argue for their ethical positions. It is because of this claim that most people do not think that they are merely saying something about their own likes or dislikes when they assert ethical sentences, nor believe that they are merely uttering disguised imperatives to the listener. The reference to *empirical* connections between approvals and experiences is what distinguishes ethics from propaganda and emotive expression.

This way of approaching ethical issues is, of course, the classic naturalistic one, supported *inter alia* by Aristotle, Spinoza, Mill, and Dewey. Now these men have often been misinterpreted as teaching that a person supports his ethical claim by insisting that his attitude is more in accord with the needs and dictates of human nature than alternative ones. But this way of construing the issue is perverse. Prior to discussion no one has proof that his views are more grounded in the nature of man than the views of those who disagree with him. After discussion, the person who has convinced his listeners may announce that because the experience of discussion has sufficed to bring about a convergence of approvals, his views are truer to human nature. But this assertion adds nothing at all to the evidence. It is useful merely for decorative purposes.

The essential point will become clearer if elaborated from the perspective of one who desires his attitudes to be shared by others. At any given time, we have attitudes which are not shared by many, but we find ourselves unaffected by our singularity. The responses of others do not affect us on these issues. But there are issues concerning which we want others to share our attitude, and if we think our attitude a correct and justified one, one that should be shared because it is right and not simply because it happens to be ours, we are likely to use moral language. At such moments we may find ourselves face to face with at least one of the following four situations.

(1) There is no one who disagrees with us, at least no one whom we address, and since no one demands justification, the question of justification is not a serious one. Thus no teacher feels called upon to justify his attitude that a student not be flogged for absenting himself because of illness, before an audience of psychiatrists.

(2) Some of our listeners disagree with us, but they can be shown that the disagreement is merely apparent; caused to reflect they notice that the attitudes they already have support our suggestion in unsuspected ways. Thus a teacher may suggest to his colleagues the introduction of course *A* as a substitute for course *B*. At first his colleagues fail to see the point, but when the teacher offers evidence that the new course will lead to greater self-knowledge and greater sensitivity than course *B* did, his associates agree.

(3) The current attitudes of those who disagree with us are really in sharp contrast with ours. If we claim that we are right, i.e. if we claim that they would agree with us if they knew of certain factors or underwent certain experiences then we may indicate these. If after being under those conditions, those who had disagreed with us change their attitude and agree with us, we have justified our claim. On occasion, the conditions are easily specified and may consist merely of adding to the knowledge of our friends; on occasion the conditions are so intricate that they may never be specifiable. Thus a teacher who believes that no student should ever be graded may find it next to impossible to think of relevant conditions, and hence next to impossible to justify his claim.

(4) We may meet people who are not at all prepared to listen, and will not undertake any examination of their position. With such people, the possibilities of ethical argument are precluded. We may if we meet them retire to our chambers and conjure up an imaginary listener and think that if we have convinced him then we have won our case. And though such listeners may occasionally be severe, for the most part they conveniently agree with their creators. Or we may slowly and painfully walk alone, and think of a new day and a new generation when our suggestions will be listened to and followed. But though such visions succor and support us, we know that we have proved nothing. Or we may, if the agreement is crucial, forget about proof and objectivity, and adopt force or political action.

If this analysis of ethical objectivity has any claim to support, then the following consequences follow for educational theory. In the first place, as has already been indicated, it would be futile for educators to search for a series of ethical principles which are to be used once and for all as a base; and it would be a worse mistake to justify any ethical principle by an alleged deduction from a set of sentences borrowed either from psychology or theology, unless it could be exhibited that ethical sentences were equivalent to them. On many occasions, educators will, as is to be expected, use moral language and insist that certain acts are right and certain states of affairs good. If their intent is, as suggested above, to claim that others will voluntarily, upon free discussion, share their attitudes, they can rest content that with the sharing that results from give and take, they have justified their claim and hence their ethic.

Moreover, if the notion of ethical objectivity sponsored in the last section is tenable, then it lends support to some of the best insights of great educators. For it has been the intent of such educators to maximize the number of occasions upon which discussions of right and wrong can take place, and it has been their intent to inculcate such habits as tenacity, courage, perception, and understanding, that make such discussion possible and fruitful. They have been suggesting *the spread of attitudes that make possible the discussion of attitudes*. The justification of the inculcation of these higher order attitudes can be undertaken in the same way as the justification of any other attitude, i.e. by discussion and interchange of experience, not by a search for some nonhuman support nor by a search for esoteric qualities. It is of course a commonplace that all of life is an education, and that we cannot expect more from *formal* education than a preparation for education from life. Yet many forget these commonplace observations and insist that the schools and the teachers inculcate a complete ethic. But if all of life is an education, we will continually change our attitudes and beliefs, and if formal education can be no more than a preparation for education from life, we cannot expect more from schooling than an inculcation of the attitudes that make objective discussion of attitudes possible. We can learn in our schools *how to proceed* in our ethical discussions; we cannot be prepared once and for all to know what is right and wrong. That through discussions we attempt to prove and not impose our ethic, and that such attempt with its associated skills constitutes the basis of ethical objectivity and a major goal of education is the burden of this paper.

MOVABLE FURNITURE AND A THEORY OF MAN: SOME THEORETICAL IMPLICATIONS OF PRACTICAL ACTION

BY VAN CLEVE MORRIS

I

ONE OF THE MOST FAMILIAR OBSCURITIES OF MODERN LIFE IS THE CONNECTION BETWEEN THEORY AND PRACTICE. Especially is this true in the field of education, where the things that we do in school rooms with boys and girls often seem quite remote from the pronouncements of professors of pedagogy and educational theorists. Fortunately, however, the obscurity is only apparent, for the kinds of things teachers, principals, superintendents, guidance specialists, and all the rest—the kinds of things these people do in their day-to-day practice—can be explained, or as we say in theoretical discourse, "rationalized," by referring to basic theories concerning schools and human beings. This paper seeks to examine the linkage between theory and practice with respect to these two subjects—schools and people.

II

First, how about schools? One of the first things to know about the nature of the school in modern American life is that it is a *public* institution. This is well known, of course, but there are some significant specific facts that flow from this fairly obvious general one which are perhaps not so well known. When we say the school is a public institution, we mean that the people who run schools are public employees, and that education is, in the political word we use, a socialized enterprize. And this means of course that teaching in America is a *socialized* profession.

We hear a lot of squabbling nowadays about socialized medicine, as if to socialize any major service function of our society were the so-called kiss of death, politically speaking. But we have had socialized education for over a hundred years now and nobody, to speak of, is clamoring that we are on the road to social ruin. Ironically we have always taken the view that health is a private, individual affair, but that education is a public, social affair. If you get sick and are about to die, that's your own tough luck. I have no special social obligation to see to it that you get proper medical attention. That's up to you. But if you allow your children to grow up uneducated, that becomes of real concern to me and my neighbors, and we can even send the law around to *force* you to get your children into the school.

Now to say that the school in America is public is also to associate it with government, and there are many who believe that too close a kinship with government can be a very distasteful thing. In a recent pamphlet on education published by the National Association of Manufacturers the following appears:

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With governmental support and control there is inclined to be:

1) less consideration of minority wishes by the majority,
2) more dependence on the advice of professional experts than on purely local considerations, and
3) more inclination to follow current political and sociological ideologies which may not be approved by some individualists.[1]

The author of this sentence obviously has never been to his local school. For if he had made the visit he would find quite the opposite. At that school which is governmentally supported and controlled he would find all kinds of minorities, even the minorities of one, being soothed and placated by the agent of the majority, the principal; instead of experts in every corner, he would find just ordinary folks (probably arranged in discussion groups!) trying honestly to solve the troublesome problems of teaching boys and girls; and to crown all, instead of visionary, socialist crackpots lurking in the halls and classrooms, he would discover a group of timid and frightened teachers who would hesitate to admit even a membership in the League of Women Voters—if, of course, they were members, which, of course, they are not.

What the public-izing of education has done to the teaching profession is not all lovely to behold, and many of us can understand the medical profession, though not support it, when it fights the public medicine movement as vigorously as it does. All it has to do is look around the corner to see how the socialized profession of teaching is making out.

To summarize, if the *theory* of public education is more or less as stated here, and if we are committed to it (and we seem to be), perhaps we should more readily recognize and evaluate the kinds of *practical action* which this theory seems to produce in educators. For many thoughtful persons are increasingly of the opinion that the embattled principal and the timid teacher are direct products of the public and socialized character of American education.

III

Much more could be said about the school. But turning now to boys and girls, we might change the procedure a little bit. Instead of developing the theory of boys and girls first and then identifying the practices of teachers consistent with that theory, we might reverse the sequence, i.e., examine some concrete examples of practical action in our schools today and see from what kinds of basic outlooks they seem to originate. Three come immediately to mind.

1. *Social promotion.* It could be honestly said that the modern elementary school has veritably fallen in love with social promotion. Boys and girls who are unable to read at the first grade level are moved on to the second grade. Youngsters who have not mastered long division in the fourth grade are moved nonetheless to the fifth. Why?

Contemporary critics of the public schools say that this practice is the outgrowth of a deterioration in standards. Teachers themselves might try to explain it by saying that experimental evidence seems to indicate that repeaters do not often do much better the second time around than they did the first. Still other

[1]Educational Advisory Committee and the Educational Advisory Council of the N. A. M., *This We Believe About Education* (New York: The National Association of Manufacturers, 1954), p. 12.

teachers might openly admit a reluctance to endure a troublesome youngster for another whole year and hence yield to the temptation to move him along.

But these are only the surface reasons. The real reason is this: Boys and girls in our elementary schools learn from many sources other than teachers, books, motion pictures, field trips, and other standard paraphernalia of the typical school. They learn from each other. If you cut off a child from his age group, if you separate him from the social unit in which over nine months he has managed to gain full fledged membership, you are literally cutting him off from one of his "teachers," namely, his psychological and social peers.

To say that children learn a great many things about their environment from each other is to say that we have only within the last half-century awakened to the profound significance of the old cliché that man is a social animal. At one time believing that the sociality of man was primarily manifest in his recreation and play, we now recognize that his very character is formed through intimate association with other human beings. Our colleagues in anthropology and social psychology have demonstrated that in a very real sense our very human nature—our desires and preferences, our outlooks and values, our seemingly natural habits and behavior patterns—are in actuality hammered out in the course of social experience.

This means then that if a young child is cut off from his own kind, he begins to wither a little, and no amount of watering and fertilizing by an adult teacher—a person *not* of his own kind—will make up the deficit entirely. So, it is not through some humanitarian and altruistic softness that we seem to wink at failure in spelling or arithmetic and pass a child to the next level. It is rather through a rational and empirically demonstrable conviction that the kinds of learning available to a youngster by keeping him with his age group are often quantitatively and qualitatively more important than the kinds of learning obtainable by the repetition of a grade in school. It is possible, of course, to question the application of this general theory, or the decision reached on any given child; but if you dispute the theory itself, you are making bold enough to run counter to an ever-increasing body of empirical evidence regarding the social psychology of man.

2. *The grade-less report card.* Another standard and widespread practice of modern schools is to report the progress of pupils in a variety of ways other than the standard ABC method. Some schools, for instance, attempt to convey a general notion of the quality of pupil work through the symbols of S for Satisfactory and U for Unsatisfactory. Others have adopted the plan calling for short notes to parents regarding the work of their children or brief commentaries on each child recorded and inserted in what we call an anecdotal record file. Still others have tried to do away with grades and report cards altogether, choosing to adopt the dictum of Professor William Heard Kilpatrick who once said that, in education, it ought to be the rule that "No news is good news."

Now again our critics, especially among the lay public, accuse us of lowering academic standards and of becoming indifferent to the values, intellectual and moral, to be found in rigorous study of the standard academic disciplines. And teachers themselves may be a little vague about all of this, saying that you can't really differentiate between the achievement of children, and that letter grades are largely guess work, or that continual failure for any individual is psychologically unhealthy and, according to the fringe element, that the ABC grading system is to blame for making people fail!

But these are only the superficial and erroneous reasons. The real reasons are to be found elsewhere. In the first place, we have come to realize just within the past couple of generations that the real rewards of learning are intrinsic to the learning itself, that the sense of accomplishment, the awareness of new insights, and the recognition of genuine growth within oneself are payment enough for the effort put forth in learning. I know a first grade teacher who every Monday morning gives a gold star to all of her children who attended Sunday school the day before. Besides being a questionable practice in light of our anxious desire to keep church and state separate, it testifies to the belief on this teacher's part that the rewards of attending Sunday school are not sufficient to attract youngsters and that they need the additional, extraneous bait of a gold star on Monday to overcome their habitual, and in many cases justified, resistance to perform a duty on Sunday. If performing religious rites requires the mild bribery of a secular institution like the school, then perhaps it would be wise to re-examine the religious rites themselves. So likewise, if learning is so purposeless that youngsters require the use of extraneous rewards represented by grades, then perhaps it is time to re-examine the kinds of things we are asking boys and girls to learn.

But on a more basic level of consideration, we are de-emphasizing grades because they measure only one aspect of growth and development, namely, the mastery of encyclopedic content in a prescribed course of study. One of our traditional theories of education is that learning is the mastery of subject matter set out to be learned. In general, this view of education is based on the theory that man is a potential receptacle of knowledge. His peculiar distinction in nature is that he can learn things, store them up in his head, and then withdraw them for use at prescribed times. This goes by the facetious name sometimes of the Two-Gallon Jug theory of education; on other occasions it is referred to as the Cold-Storage theory of education. Man is a psychological warehouse, where treasures from the encyclopedia may be carefully mastered, tucked away in a special place in one's mind, and then withdrawn on request for use. In circumstances like this, grading youngsters with A's and B's and C's is to ascertain *how much* of this material they have mastered and stored away in their heads, and *how much* they can subsequently regurgitate on demand for a paper-and-pencil test.

But man is a lot more than a psychological Sears Roebuck. He is, of course, blessed with the peculiar facility of mastering content, but what makes him such a remarkable creature is his ability to employ this content in reorganizing his life, in constantly modifying the responses he makes to his environment so that his future conduct can be classified in some way as superior to his past conduct. Mastering content is only a part of the job of learning. The other part is allowing the insights of content mastery to flow into our lives in such a way that our behavior becomes progressively more mature; it is the task of learning things about our environment and seeing to it that these learnings somehow don't get stuck in our brains but flow ultimately into our whole beings, making our lives more meaningful and intelligent and hence more human.

It is this ability of the learner to indicate *by his behavior* that he has learned something that increasingly needs our attention in this business of grading. The ABC's may indicate how much we have put into our heads. But now we need another grading system to show how much we integrate into our daily conduct. In this instance we see that practical action—de-emphasizing grades—is only the protest movement against an obsolete theory of man—a psychological warehouse. The

protest must now turn its energies in more affirmative directions so that new practical action, i.e., a new grading system, may fulfill the spirit of a recognized reconstructed theory of man, i.e., a behaving, growing organism.

3. It is perhaps time now to return to the scripture lesson of this little essay—the connection between movable furniture and the nature of man. Just as in the previous instances, there is a demonstrable nexus between those practices we employ in our schools and the theories of man we carry in our heads.

The older school was typified by straight rows of desks, firmly secured to the floor, and all facing the podium as in an auditorium. And of course the classroom was literally an audit-orium, a place where you were supposed to sit quietly and listen. Learning was not only thought of in the receptacle sense discussed above, but was also influenced by the mechanism and inflexibility of an advancing technology. This was the age (the latter 19th and early 20th centuries) of the "mechanical man." It was the age of the discovery and rapid spread of science, of technological applications of science, and ultimately of what we call mass production techniques. If technology and mass production could turn out highly intricate automobiles, refrigerators, and radios, then there was no reason to believe it could not also turn out educated human beings. Under the spell of this mentality, we cooked up a variety of mechanical theories of man all the way from the faculty theory of the mind to Behaviorist psychology.

This was also the age of the inter-changeability of parts, probably one of the most important technical discoveries making mass production possible. And so we in education came to see that not only were individuals pretty much alike in their needs and requirements in the school, but the things they studied and learned were more or less interchangeable. It was almost inevitable then that we should eventually stumble upon the Carnegie Unit and the credit-hour. Any course that can get approval of the academic powers and which meets three hours per week may carry three of these credits and is equal to any other course of similar design. If you attend regularly for forty-five class sessions, do what you are told, keep your ears open and your mouth shut, and in general remain docile and manageable, it is no trouble whatsoever to pick up three of these credits. If you can continue this procedure for four years, you can collect these credits as you would little coupons. And when the final June rolls around, and if you have collected a total of 120 or so of these coupons, you are entitled to gather them up in a bundle, carry them to the box office, and redeem them for one large coupon which hence forward in your life may be modestly produced in polite society to indicate that you are an educated person.

In the light of all this pedagogical technology and psychological mechanism, it is no wonder that we have thought it so important to place children in rows of seats which could not be moved, and to design these seats in such a way that the eyes, ears and mouth should all be pointed forward so as to receive stimuli and emit responses on call in connection with the performance of a teacher on a raised platform up in front.

Now we are hopefully moving out of the age of the mechanical man into what we think is a more humane definition of his psychology. It is true, of course, that many of his needs and requirements are standard and that much of his learning can be mechanically organized and presented, but man is a much more complex creature. Each individual we now recognize has his own peculiar curve of development, each his own special channels of growth, each his particular areas of ability and creative

competence. It is this kind of man who now inhabits our school rooms, and if education is to give elbow room to this side of man, if it is to let this creative impulse breathe and live, then its methods must necessarily become less entangled with inflexible seating arrangements, classroom ritual, and administrative bookkeeping, and become increasingly more attuned to the free and open atmosphere characteristic of an unregimented society.

We haven't yet seen any feasible way of doing away with the Carnegie Unit and semester hour bookkeeping systems, and it is probable that in order merely to administer education for the masses we will have to keep them, but there is no particular reason why we cannot change our practices inside the classroom, unscrewing those rigid lines of desks and replacing them with chairs and tables and desk-seats which can be moved about as the requirements of the learning situation demand.

IV

Here we have three instances of practical conduct in the performance of educational duties which we have tried to connect to changing theories of man. By indirection this essay has taken a look at a variety of other things we do in the schools and how they relate to outmoded notions of human beings. We might have discussed many, many more. We could have taken a look at the phenomenon of extra-curricular activities, at the project method of teaching, at the idea of free textbooks or free lunches; we might have considered the kindergarten, or the G. I. Bill of Rights. Certainly each of these recent innovations on the educational landscape has its explanation in a changing conception of man and the world he lives in.

But the point of this paper is and ought to be more than simply a rehearsal of some interesting ways in which what we do connects with what we think. We might ask, why have theory at all? If practical action seems to evolve along humane and sensible lines, why must the variety of theories underlying our actions be identified and clarified? In short, what is the special function of theory anyway?

In hasty answer to this question, the least we could say is that all of us should know what we are doing, and knowing what we are doing signifies knowing why as well as how. After all, it is practically impossible to conceive of *doing* anything without having consciously or sub-consciously some motive or object for doing it. In this relatively superficial sense, theory becomes merely the complement of practice, merely the other and necessary side of a coin which in our daily lives is usually turned practice-side up.

But theory has a much more important job to do. It is through theory that we are able to connect one practice with another to see if they are consistent, coherent, and hence intelligent. Is social promotion compatible with the de-emphasis of traditional grading systems and with the introduction of movable furniture? By referring all of these practices to the basic conceptions they stem from, we find they are all of a piece; they come out of an aggregate of modern notions of man that seem to have kinship with one another.

If social promotion is ultimately based on our new awareness of the sociality of the human species and the discovery that he learns much of his character and personality by mere association with his kind, we may infer that the types of things he learns from his kind are more associated with his social behavior than with the

(*Continued on page 224*)

PERCEIVING PSYCHOLOGICAL MOVEMENT IN THE CLASSROOM[1]

ALVIN R. HOWARD

WE ARE ENMESHED IN AN ERA OF MASS EDUCATION. Despite continually increasing hardships imposed upon them, educators are constantly required to "mold" millions of students annually. Equipment is poor, salary is poorer, but the abundance of students continues. Mass techniques thus appear to be a logical solution for undertaking an almost insurmountable task.

Yet we know that in the course of mass education and mass evaluation some students will suffer from lack of a more individualized approach. Thoroughly surrounded by culturally-imposed molds of every description, they soon learn the value of "A" and the undesirability of "F", but seldom grasp the concept of the active, continuing process of "learning." Can the student be diverted from his intense pursuit of the grade-goal? Can the teacher increase awareness of the satisfactions to be derived from learning and from learning how to learn? Can all this be accomplished within a cultural framework that only yields imperceptibly?

Obviously, cultural pressures on students and educators alike are frequently excessively powerful. The parent applauds the "A" and chastizes the "F". He offers appealing rewards for "good grades"—a new doll, electric trains, a formal gown, a red convertible. "Bad grades" meet with disapproval manifested in various overt and covert ways which demand improvement of the student. Peers, too, compete with each other for these questionable marks of distinction. The striving to be better than the next man finds curious relief in these ill-defined hieroglyphics. The feeling of inferiority may shortly loom before the unsuccessful student and gradually become firmly assimilated into his self-concept.

The educator is likewise besieged by a series of pressures which he finds it difficult to modify. The parent wants to know, in concrete terms, how his child is doing (compared with other parents' children). The school itself requires certain data reflecting the status of all its pupils. Classes are overflowing and the overworked teacher understandably grasps available means for relieving these persistent pressures. Thus the subjective test, or the objective test, or the rating scale is resorted to for the purpose of indicating the *status* of a student relative to *other* students.

Test results and grades are what may be termed *measured movement.* An outside observer appears on the scene, measures status at Time A, later measures status at Time B, and then makes an inference concerning the objective change which appears to have occurred. But what of the subjective view? What of the perceived movement? "If a student is to realize the maximum from his attendance, he must somehow develop the notion that he is in the process of changing; for if he

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[1]Work not conducted in the Veterans Administration. Grateful acknowledgment is made to Dr. George A. Kelly for his review of the manuscript.

perceives no change, he may inquire, 'What good is an education?'"[2] Is it likely that we have been overemphasizing status while neglecting the essential aim of the educational process, movement? May we request the harried educator to extend himself even further in the effort to emphasize the role of the individual's perceptions of the learning process? If the student perceives that he is learning, will this not aid him to comprehend the value of an education? Will he not generally continue in that situation which he views as more desirable to him?

It would seem that we risk stifling incentive by employing a concept such as "final grade." Many students infer "final" attainment and do not regard it merely as achievement of a given termination. The grade is received, the content may now be forgotten. The culturally desirable symbol of finality will always be available when required for display. Status in the group has now been determined. Other groups, other courses may follow. In time, statuses in those groups also will be determined. Should we not focus increased attention on facilitating arousal of the perception that one is moving within the ongoing process of learning rather than that one has learned? Do we seek too much of the educator if we ask him to strive continually to help the student understand that beyond the grade-goal there is the more intense satisfaction that derives from the perception of oneself as a continuing learner?

Certainly a mammoth task confronts us and nothing short of a mammoth solution would appear likely. The student, the educator, the parent have varying reasons for clinging tenaciously to the grade concept. It is not anticipated that they will willingly and totally relinquish their firm grasps on such a widely accepted cultural tradition. Even if the educator wishes to do so, he must face the parent and the child and the overcrowded classroom which militates against more than a minimal degree of individualized attention. Nevertheless, it does seem that many educators are in a position to de-emphasize tests and grades once they themselves have assimilated the concept of learning as a process. Until a more fruitful approach is agreed upon, the test and the grade may have to be administered. But perhaps the teacher can profitably devote some time to discussions of tests, test results, and grades as examples of learning experiences. Here stress may beneficially be placed upon the perceived movement of each student in reference to some personal norm. This should help to divert many students from their headlong pursuit of the grade-goal. Comparison with others in the group need not then continue to assume undue importance. The pursuit of grades will undoubtedly remain a desirable goal to many students, but not *the* goal. The primacy of grades would now be challenged, and by the same persons who exhibit the need to assign the grades.

As with any technique, difficulties will be encountered. The personal norm may be set too low or too high, but this occurs even in the presence of the most advanced techniques in current use. We do not propose, however, to ignore this dilemma merely by passively recognizing its existence. Movement theory seems to provide a starting point for attacking the problem.

What if the personal norm is set too low according to the view of the external observer? What if the perceived movement of the student exceeds the measured movement recorded by the teacher? As long as the student contrasts a given

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[2]Howard, A. R. and George A. Kelly "A Theoretical approach to Psychological Movement", *Journal of Abnormal and Social Psychology*, 1954; 49: 399–404.

former status with his current "better educated" status, he will continue to view school experiences as desirable events. This is consistent with the educator's aims so that if he tentatively accepts this contrast hypothesis[3] deriving from movement theory he need not view all students' perceptions with alarm. The serious student, at least, will indicate continued incentive for further change. He has perceived extensive movement in himself; he is not likely to inquire, "What good is an education?" Theoretically, then, that would seem to leave unaccounted for those students whose goals are set beneath those of the external observer, whose perceived movement exceeds that measured by the external source, but who now seek no further change. Until novel approaches could re-arouse motivation in such students, we would be forced to consider seriously the proposition that the desired goal had been achieved. In his fundamental postulate,[4] Kelly states: "A person's psychological processes evolve toward what he construes to be an optimal anticipation of events."[5] Perhaps the student's ultimate lack of seeking further movement can then be ascribed, as disinclined as we are to face this prospect, to his perception of having achieved that level of "optimal anticipation."

What of the student whose personal norm is set too high according to the view of the external observer? What if the perceived movement of the student is less than the measured movement recorded by the teacher? How can the student be expected to perceive a current "better educated" status over his former status? Here a variant of the contrast hypothesis is offered. It is hypothesized that the recall of a relatively minor change that the student formerly perceived in himself, when contrasted with a more recent, albeit minor, movement he reports, will stimulate anticipation of further movement. This recall will, in most instances, have to be initiated by the educator but herein lies one response to the problem of how to motivate or re-motivate students. This could be one of those "novel" approaches referred to above. If this variant of the contrast hypothesis is acted upon and supported, we would have an analagous situation to that which is said to exist when the perceived movement of the student exceeds the measured movement recorded by his teacher, *viz.*, the student will perceive a "better educated" current status and will continue to view school experiences as desirable.

SUMMARY

The intent of this paper is to indicate that, even within that framework of tests and grades which it is hoped will be subsumed eventually by a more meaningful superstructure, the educator is in a position to de-emphasize the cultural weight attached to the status of a given moment. The student can be diverted from his intense pursuit of the grade-goal. The teacher can increase awareness of the satisfactions derivable from learning and from learning how to learn. Perceived movement can achieve the level of recognition now only accorded to measured movement.

[3]In an earlier paper, the more general statement of this hypothesis is discussed in greater detail: "Perceiving movement in himself, the individual will, upon contrasting what to him is the relatively static past with the ever-moving present, tend to construe a continually widening gap between his present and past behavior." Howard, A. R. and G. A. Kelly, "A Theoretical approach to Psychological Movement."

[4]In the published work, this postulate has been revised slightly: "A person's processes are psychologically channelized by the ways in which he anticipates events." Kelly, G. A. *The Psychology of Personal Constructs* (New York: Norton, 1955) 2 vols.

[5]Kelly, G. A. *The Psychological Construction of Life* (Psychological Clinic Library, Ohio State University, 1951), p. 29.

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THE IDEA OF VALUE AND THE THEORY OF EDUCATION

BY C. D. HARDIE

IT WOULD BE WIDELY AGREED THAT THE PRESENT DEADLOCK IN EDUCATIONAL THEORY centers mainly around the nature of value. How do we decide whether one aim of education is better or worse than another? Do subjects in the curriculum derive their value from the extent to which they satisfy the needs of children or do some subjects have value independently of such needs? Is some religious belief necessary to give an adequate ground to value judgments in education? If some authoritarian basis is necessary, then how can education preserve democratic values? And so on.

Now there have been, I think, throughout history three basic views about value problems. The first type of view, which has become much more popular in the last two or three decades, is the sceptical answer. This has taken various forms. In its simplest form it says that the attempt to judge which is the better of two inconsistent aims or ideals or standards is necessarily doomed to failure. For we can make such a judgment only by employing some standard of better or worse. And how are we to obtain such a standard? If we obtain it from either of the standards which we set out to compare, then the whole process is merely circular. Are we to educate children in a democratic way or in a totalitarian way? If we are to give a serious answer to this, we must be able to compare the democratic with the totalitarian virtues and decide which are better. But what standards are we to use in deciding which are better? If we use a standard derived from the democratic way of life, then naturally we shall decide that the democratic virtues are better; and if we use a standard derived from the totalitarian way of life, we shall decide in favor of totalitarianism. The simplest form of scepticism says that this situation is inevitable. It is always impossible to compare, for example, moral ideas or moral principles with a view to judging some better than others. Most moral principles can be put in the form "it is better to do an action of one sort rather than one of another sort," and, according to the sceptic, no one can demonstrate this to be so without committing himself to a circular argument.

Another form of scepticism is more cynical. It argues that all moral judgments are advanced by one group or class of people with the intention of deceiving another group or class. This view is at least as old as Plato, for in Book I of *The Republic*, Thrasymachus defines justice as "the interest of the stronger." The laws of the State are framed, he argues, to serve the interests of the government, which is stronger than its subjects. It is considered unjust to violate the laws of the State. Therefore justice is properly defined as the interest of the stronger. In opposition to this, but still belonging to the same type of view, is the theory that the ideas, for example, of Christian Ethics, are devices of the weak to protect themselves against the strong. Similarly "bourgeoise morality" is believed by some to be a means by which the capitalist classes attempt to keep the proletariat in its place.

Still another form of scepticism is the version made popular in recent years by the Logical Positivists. According to this, value judgments, strictly speaking, are

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neither true nor false. The positivist argument rests on a general epistemological thesis to the effect that if a statement is to be meaningful it must either explicate the meaning of some word or group of words or else assert something about the universe. It goes on to maintain that value judgments do neither of these. Thus they are not really judgments at all. This argument is reinforced by the distinction drawn between two different uses of language—the scientific or communicative use and the emotive use. Language is being used scientifically when anything is being asserted. "The cat sat on the mat" is a perfect example of the scientific use of language. It is this use which enables language to function as a means of communicating information. When language is used emotively, however, nothing is asserted about the universe. Perhaps the purest emotive use of language is in interjections such as "Damn!" When I say "Damn!" I am not asserting anything, although I may be expressing a great deal. It is not even true to say that I am asserting that I am annoyed, because if I were asserting that, I could be significantly contradicted, and there is no contradictory to "Damn!" Thus when I use language emotively I am expressing the way I feel about something, but I am not asserting that I feel that particular way. Generally the emotive use goes farther than that, and is designed to influence the hearer's attitude as well as to express the speaker's feelings. The positivist analysis of what appear to be value judgments is consequently something like this. "X is good" *expresses* what is asserted by the statement, "I approve of X and I want you to do so as well". "X is good" does not *assert* this, for if it did, it would be a scientific statement about what I approve and about what I want. But it expresses this in the same way as "Damn!" expresses the fact that I am annoyed, but does not assert it. This view of the Logical Positivist may reasonably be classified as sceptical because it maintains that value judgments are not true or false in the way in which ordinary judgments are.

INTUITIONISM AND PRAGMATISM

Let us pass now to the second type of view about the nature of value. When anyone starts to reflect about human behavior, it becomes obvious that value concepts and principles are of great importance, but the question is how on earth do they arise? They are obviously not obtained by means of the observations we make with our sense organs in the way in which, for example, our ideas of color are derived. Nor is there any evidence of them in the non-human world from which *homo sapiens* is alleged to have evolved. They must therefore have originated in one of two ways. They must either have been established in some way independent of man or they must have originated in man's own nature. Probably most people subscribe to the former of these alternatives which is the second of the basic views about value. Such people believe that there are certain value concepts (e.g. moral ideas and principles) which have an objective reality apart from human nature, and that man becomes aware of these concepts by a process of intuition. Hence Intuitionism is the name generally given to theories of this kind.

Intuitionism maintains that the truths involved in value judgments are not obtained in the way that generalizations are ordinarily obtained—by induction from particular cases. They are rather recognized whenever a single case is presented for judgment, and the truth is recognized as clearly in such a case as when a thousand cases have been presented. The rightness of honesty, for example, is understood, if it is understood at all, once the ideas of rightness and honesty have been intuited, and induction in the ordinary sense has nothing to do with it. The nature of intuition inevitably gives rise to considerable disagreement, even among those who subscribe to this type of view. The existence of a "conscience" or a

"moral sense" may be postulated, while many intuitionists ground their intuitions on religious faith. But, however that may be, the typical characteristic of this school of thought is that there are ideas and principles which exist in their own right. Nevertheless, although they exist independently of man, he can become aware of them and can guide his behavior according to them.

The third of the basic types of view about value accepts, against scepticism, that there are value concepts and principles, but denies that they have been established independently of human nature. Moral behavior, for example, is just one of the characteristics of human beings. We ought therefore to try to explain it in the same sort of way as we explain other characteristics. If a child learns the multiplication table successfully, we rarely think of saying this has been imposed on him by some supernatural agency. Similarly we should look for an explanation of his moral behavior in terms of human nature and its environment.

I shall give the name "Pragmatist" to this third view of value problems, although in doing so I shall be using the term rather more widely than is usual. According to this view, value concepts are judged good and value principles right if they are found to lead to satisfactory consequences, and this is not just a tautology, for everyone knows when consequences are satisfactory and when they are not. Consequently, moral principles are principles which, when followed, tend to lead to a satisfactory life. They are thus obtained empirically—by induction from observation of human behavior—and are verifiable in the same sort of way as physical or biological principles.

It may be objected that the pragmatist account of values is too wide. Some of the conditions of a satisfactory life for man involve rules of hygiene and nutrition, and it is not customary to include these in a list of moral principles. Yet this seems to me an argument in favor of the theory rather than one against it. The "ought" of "you ought to have fresh air and exercise" and the "ought" of "you ought to return good for evil" are each to be justified, if this view is correct, by observation of what happens when human beings obey them and when they do not. Neither "ought" is mysterious—to be explained in terms of what God has commanded or in terms of an alleged categorical imperative. In each case the "ought" is to be explained by the increase in satisfactoriness of the life of the individual.

It will be clear now how the Pragmatist would refute the sceptic. Moral principles are those which lead to a satisfactory and therefore good life; consequently, moral principles will exist if there exists a satisfactory life for man, and most people have had experience of this, even if too often their lives are unsatisfactory. Thus it is wrong to say moral judgments are not really true or false, just as it would be wrong to say physical or biological principles are not true or false. While this is an answer to scepticism, it does not indicate that kind of ideas or standards that are to be accepted. These have to be discovered by observation and experiment, and from the nature of the case, it is not an easy matter to discover them. As an illustration, however, the so-called cardinal virtues—wisdom, courage, temperance, justice, faith, hope and love—can be observed to have consequences that increase, in general, the satisfactoriness of human life. The inductive generalizations of great moral teachers such as Socrates and Christ can be similarly construed.

INTUITIONISM AND PRAGMATISM IN EDUCATION

In education it is obvious that the traditionalists (Idealists, Essentialists, etc.)

subscribe to an intuitional view, while Progressive educationists subscribe to a pragmatist view. Few prominent educationists openly advocate scepticism, but there is no obvious reason why it should not also have its adherents.

Now the history of ethics is a dismal record of the arguments and counter arguments which have been urged by the supporters of each of these theories against the others. Indeed it is hardly an exaggeration to say that there has been a deadlock in ethics for hundreds of years. It is therefore not the least surprising that the supporters of different educational theories should feel that to some extent they have inherited this deadlock.

This conclusion is reinforced if we ask how we learn to make judgments of value. The pragmatist view has a simple enough answer to this. We learn about values in the same way as we learn about anything else—by observation and experiment. Value judgments are tentative hypotheses which are confirmed or rejected when they are found after trial to increase or decrease the satisfactoriness of life. The intuitional view has no very clear answer. It hopes that if value judgments are asserted often enough by the teacher, then eventually the child will intuit their truth as his own. The position is similar to that of the geometry teacher in the old days. As Sir John Adams used to say, if after repeated assertions by the teacher a child still refused to admit that when equals are added to equals the results are equal, then all that could be done was to send the child home with a polite note to the parents informing them of the sad fact. The sceptical view—at least in the more sophisticated form of the Logical Positivist—would maintain that the child learns to make value judgments by having his emotions appropriately conditioned. Now it must be admitted that in practice almost all parents and teachers use all of these three methods. If, for example, we want to teach the child to judge that honesty is right we shall probably (1) make sure that he is favorably conditioned to examples of honest behavior; (2) enunciate the judgment "honesty is right" frequently and on the most appropriate occasions; (3) point out consequences of such a judgment which have provided a satisfactory state of affairs in the past.

The practicing teacher or parent thus finds no inconsistency in using all three so-called theories, and would in fact consider that exclusive reliance on any one was just poor teaching. This indicates that these theories are not "theories" in the modern linguistic sense of the word at all, but are concerned with *the reasons people give for their judgments rather than with the judgments themselves.* Now people generally differ considerably in their reasons for doing anything. Such disagreement is normal and there is no need to try to whittle it away. If indeed we did succeed in making everyone give the same reason for their value judgments, then we could always ask the further question what reasons have they for giving these reasons? And people might well disagree in the answer to this question, so we might just as easily accept disagreement about the first kind of reason.

The vital thing is always what value judgments are accepted in a community. The reasons for acceptance may be of great interest to certain individuals, but they are of secondary importance. By concentrating on the reasons, both traditional and progressive educationists have produced an appearance of deadlock. The questions asked at the beginning of this article, for example, are all concerned with reasons for accepting certain judgments, and it is inevitable that before the discussion of them has proceeded very far, the familiar features of ethical deadlock will become apparent. By concentrating rather on those value judgments on which agreement has been secured, I believe educational theory could become constructive.

THE PROBLEM OF FREEDOM IN CONTEMPORARY PHILOSOPHY OF EDUCATION

BY DAVID L. MILLER

I

THE CHIEF PROBLEM OF WESTERN CULTURE AND, CONSEQUENTLY, OF INSTITUTIONS OF HIGHER LEARNING, is the problem of explaining why men are free. This problem has increased in complexity under the influence of rationalism which maintains basically that all phenomena, including the meticulous and detailed behavior of men, are completely determined and can be expressed and explained by use of simple causal laws and mathematical equations.

It is said by many that if we knew enough about the past and the present, then all future events would be completely predictable. Also, since what is completely predictable is completely caused or determined by what serves as a basis for predicting it, namely past and present circumstances, there is no such thing as freedom. If this were true it would imply that freedom is not only incompatible with determinism but is also incompatible with the causal principle, and with the existence of a rational order of events. In fact, many have come close to saying that freedom means the absence of order and rationality; that it is possible only if the world is chaotic.[1]

The social sciences have copied the physical sciences in the method of approaching problems. Like the physical scientist most social scientists believe all social phenomena are completely determined by past and present events and that we can explain them by social laws. Similarly most psychologists accept the behavioristic approach in accounting for the thought and action of the individual. The ideal of all the human sciences is to account for human behavior in terms of blind and extraneous causes over which the human beings under consideration have no control. They seem to say; "Everything follows a fixed law. There are no exceptions to law and order. There are no miracles. All things are predictable in principle, if not in fact." Then straightway they turn around and say: "A knowledge of laws and of the manner in which things are strictly determined will enable us to shape the world of events differently than they would be without our intervention." In other words, a knowledge of a determinate order will make us free to change that order. This is a contradiction.

II

To say that enough knowledge would enable us to predict the entire future implies that there is only one possible future, and that there is only one possible rational order. If this were the case certainly no one would be free to change that order and a knowledge of that order would not increase our freedom. In fact it is

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[1]See Arthur Compton, *The Freedom of Man.*

precisely the belief that somehow the entire future is predictable which implies the impossibility of freedom. Of course we know the future is not predictable in fact. But to say it is predictable in principle means in effect that there is one and only one possible rational order of events and that our knowledge of it cannot change it in the slightest degree. That is why I say the greatest problem raised by science is the problem of explaning why men are free, for if it is impossible to change things, clearly there is no freedom. If everything is determined on the basis of the past, and if the past, like a syllogism, can unfold in only one way, then there is no freedom.

But more serious is the question of how men can assume responsibility, how they can do what is right and wrong, in short, how men can be ethical if they are not free. This question brings to focus what has been, and is for many today a serious conflict between the Hebraic-Christian tradition and the Greek tradition, both of which lie at the basis of Western culture. The Hebraic-Christian tradition has always emphasized freedom and the ethical side of man. Traditionally the Western theory of the nature of man came from religious channels. On the other hand our science, industry, and technology have their main roots in the Greek tradition. Until recently there was no serious conflict between them. Only when science began to encroach on the business of clarifying human nature and redefining the nature of man, did the conflict appear in a serious way. Darwinism plus behavioristic psychological systems plus the social sciences, such as Anthropology and Sociology, greatly influenced by the general theory of evolution, constitute a definite revolt against the Hebraic-Christian theory of man and they seek recourse in the Greek thesis that man himself comes under the control of a set of impersonal, ruthless, natural laws. Laplace claims the future is not open and free, so to speak. Rather, he says, whatever is caused is predictable and whatever is predictable is caused. Furthermore, he believes everything is completely predictable. Here you may expect me to bring in Heisenberg's principle of indeterminacy or uncertainty in order to explain how men are free. Allow me to state at the outset that in my judgment this principle has nothing whatever to do with the problem of freedom. My approach will be quite different. I believe men are free. I believe knowledge and science increase that freedom, but I also believe in law and order and that everything that takes place can be accounted for on rational grounds, and that the past and present lend themselves to being causes or conditions for alternative possible futures.

Our confusion over the problem of freedom is due to the belief that since everything can be accounted for on rational grounds, therefore there is only one possible order of events. My thesis is that there are many possible orders of events each of which is perfectly rational and intelligible. The possible is not exhausted by the actual. Yet whatever is possible is perfectly rational. When Leibnitz spoke of the existing order as the best possible world he certainly did not wish to imply that it was the only possible world, nor did he wish to say that any other possible world would be less rational or less intelligible. Which is to say that one cannot make a choice on the basis of rationality. Whatever order of events we choose, one may be rational as the other. No one can suspend or violate the laws of nature. Whatever happens is explainable. If I put water in the motor of my car, what takes place will be as rational and intelligible as it would be had I put oil in it. If I put sugar in the gasoline of my car, the results are quite intelligible and explainable.

Leibnitz did not argue that God chose the present system on the basis of its logical consistency. Rather when he said "best possible world," he meant best from an ethical, moral standpoint.

III

This brings me to four points that must be stated here. First, neither a choice nor, consequently, freedom depends upon the absence of order and rationality in the external world of events. Or, as a corollary, both choice and freedom presuppose a rational, lawful order of external events. Second, choice is never made on rational grounds alone, but always on ethical grounds. Reason does not tell us what to choose; it only tells us whether or not what we choose can become actualized. Choice is made on the basis of what men believe to be the better or the best of alternative possible and equally rational orders of events, but not equally good from the standpoint of desired and desirable ends or goals. Third, the ends or goals chosen are certainly conditioned by the past and the *status quo*, and the past and present are necessary conditions for that choice, but they are not sufficient. If the future were always completely determined on the basis of the actual present situation, then we could not speak intelligently about alternative possible futures. There would be but one possible future and it would be identical with the one which must—and will in fact—transpire. Fourth, some of the future is unpredictable, even in principle. This follows from the general principle of evolution. According to the principle of evolution new forms emerge from time to time, and since these forms are new they could not have been predicted, for the only basis for prediction is our experience of things that have transpired in the past. This means that we cannot predict forms the like of which have never existed in the past.[2]

Now since there are novel forms transpiring from time to time there is also what is properly called creative evolution. Creative evolution means making actual and determinate a form which, prior to its actualization, was only possible. The creativity of nature makes complete prediction impossible, but it also makes room for freedom.[3] And the expression of freedom of an individual means the determination of a new form which was unpredictable on pre-existing grounds. The theory of creative evolution which is contradictory to the Laplacian principle of complete predictability, justifies or makes possible the freedom which men experience in fact, and it is only because men can be creative that they are held morally responsible for what they do or do not do. Creativity and moral responsibility apply to situations where routine behavior, determined by past conditioning, does not lead to satisfactory results. Exercising one's freedom involves a creative act on the part of the individual, but it also involves moral responsibility. Both the moral and the immoral act are equally rational from the standpoint of descriptive law. The choice itself, then, does not mean the acceptance of the rational or reasonable course of action and the rejection of the irrational. Rather choice means the creating of a new course of action, and this choice for the moral man is conditioned by basic moral principles, but not completely determined by

[2]If one accepts the principle of evolution, then it is impossible, even in principle, to predict novel forms, mutations, etc. The Mendelian law enables us to predict only the like of which has been experienced. There is no super-Mendelian law for predicting mutations, nor can there be.

[3]The inability to predict a future event does not mean that event has no cause. What is shown, rather, is that the past and present circumstances lend themselves to being causes of alternative effects or futures. This is one of the basic tenets of the theory of evolution.

them. In fact, these basic moral principles have a vital meaning and are living principles because of the new interpretations placed on them by virtue of the creative, moral judgment which outlines a new course of action for the agent acting under novel circumstances.

IV

What are the implications of the nature of freedom for educational policy? First, in so far as education is professional, scientific, or technological, its contents should be thought of as tools or as means for accomplishing ends which are not themselves specified by these tools. Second, insofar as education is liberal, it is tendentious in the sense that it suggests and evaluates alternative possible goals or ends. Pure science and technical knowledge are devoid of ends and of value judgments regarding ends, but they lend themselves as means to the accomplishment of ends freely chosen. It is in the social sciences, in philosophy, and in the humanities that the problem of values or ends and the nature of man are considered. These studies, and not the formal or the technical disciplines, are directly involved in the problems of freedom. These are the liberal disciplines.

And now permit me to discuss the implications of human freedom for the particular way in which liberal, as over against the technical, courses should be taught.

First, in a democratic society, teaching in the liberal and liberating courses should not be a matter of putting out propaganda. No doubt in a totalitarian society, if liberal arts courses and courses in philosophy were taught in the schools, they would be mostly propaganda for the purpose of dictating the chief end of man. They would be taught dogmatically with the purpose of regimenting the behavior of students by stipulating the ends, goals, or values of society. Each such totalitarian state would have its philosophy and, consequently, its theory of the nature of man, and from these it would justify the propaganda. But in a democracy the liberal courses should not be taught for the purpose of binding the student to specific ends nor for the purpose of enslaving or regimenting his mind and, consequently, his behavior. Rather the liberal courses should be taught for the purpose of giving the student a basis for exercising his freedom, or, put otherwise, for the purpose of liberating him from prevalent undesirable social, economic, and political conditions and providing him with a basis for continually selecting a new and better society. This implies that a liberal education should give us a basis or serve as a prerequisite for ethical judgments; *i.e.*, judgments used in deciding what are the right and the wrong things to do under novel circumstances; and we are confronted with novel circumstances continually. From this we see that in a democratic society education of any kind should not indoctrinate the student, but should serve as a means to freedom. I believe it is impossible to indoctrinate one with loyalty, patriotism, values, or democracy itself. All of these must be freely attained or accepted. And one of the chief infections of the philosophy of education in America has been that those who formulate and direct educational policy assume that they know in advance what the chief end of man is, and, consequently, the means of attaining it. They do not look at men as if they were themselves formulating and reformulating the goals of society. They still think of men as subservient to preestablished goals.

I do not mean to say that educators are slow to allow the pupil or the student to direct his own classwork. That is entirely another question and irrelevant to my thesis that the chief goals of man are constantly under reconstruction. What I want to point out is that education is not a matter of propaganda or indoctrination. Rather its function in a democracy is to give the student the basic historical, philosophical, and cultural basis for living his own life and for helping formulate and reformulate social and cultural values.

In so far as religion is a cultural, social, and historical fact in our tradition, a knowledge of it should be included in our education. However, this does not mean that we are to go to religion alone or to religious institutions for the answer to the question, 'What is the chief end of man?', or to similar questions concerning value. In a democracy our political system underwrites and guarantees freedom of religion, and it would be as bad to have religious dictatorship regarding values as any other kind of dictatorship. Certainly we do not want either political, scientific, cultural, or religious dictatorship. Civil liberties and the freedom of individuals would be meaningless under such conditions.

V

By the very nature of pure science, it is neutral. Pure scientists say they are unbiased and are interested in basic knowledge only, not in applied science. In short, pure scientists are interested in knowledge whose use is not specified, but which may lend itself to the accomplishment of alternative goals.

It is not in the least tendentious, so it is claimed. Our immediate question is: Are the liberal courses, the social sciences, the humanities, and philosophy tendentious? Strictly speaking these disciplines by themselves are not tendentious. However, they serve as the necessary material for exercising freedom which, when exercised, is clearly tendentious. For example, in properly taught courses on race relations the teacher will not advocate desegration or other major social changes. Nevertheless such a course may well contain the material and offer ideas which may suggest various changes or no change. Such knowledge will be necessary for exercising freedom in making decisions, but it will not be sufficient. A wise choice or a decision by the individual is also necessary, and the two together are sufficient.

Let us not conclude that a liberal education is the only prerequisite for making wise decisions about major social, political and economic changes. Such decisions, when implemented, involve technical knowledge, for the physical sciences give us a knowledge of the means by which social changes are effected.

Moral obligation, when wisely and efficiently carried out, rests on both the liberal and the technical education. If we ask: Is the United States obligated to support a technical assistance program (Point IV program) in order to help technologically undeveloped countries?, the answer seems to be, yes. But if this same question is applied to Mexico, Burma, or Iran, the answer is, no. In general, no one is obligated to help another unless he has the means of doing so, but quite often, though not always, he is obligated to help others if he has the means. I say, not always, and this is precisely why the question takes on a moral character. Raw material and technical knowledge alone are not sufficient to answer moral questions.

Now to get back to the question of why the liberal courses give us the basis for tendentious decisions. I believe that the freedom of man consists in the ability to select goals and make value judgments, and that if it were not for desired goals or ends pure science would never be applied, for when it is applied it is applied toward the accomplishment of a desired and, let us hope, a morally approved end. Consequently, the tendentious attitudes emerging from the liberal courses which serve as a necessary basis for deliberation in choice, are necessary for the wise application of technical knowledge or pure science. This is one reason for requiring every college student to take courses in the physical sciences. But these courses for non-technical students should not be simply elementary courses serving as a basis for more advanced courses in the sciences. Rather, they should be designed to (1) show the student precisely how certain basic principles in science have in the past affected and may in the future affect major social, political, economic, and religious changes and, (2) develop in the student, not what is often called a scientific attitude toward life but, rather, an attitude toward science itself, namely, that science in a civilized society is necessary to the accomplishment of social ideals freely chosen on the basis of deliberations grounded in a liberal education.

Although liberal courses are not directly tendentious, it is easy to understand why many people believe they are. The explanation is simply that evaluations and ethical judgments presuppose a knowledge of circumstances and a knowledge of history and of man and his culture. Liberal education gives us this knowledge. Of course, we have heard many times recently that there should be a moratorium in the physical sciences, especially in the field of nuclear physics. Offhand this suggests that research in nuclear energy is tendentious also, but here it is clear that what is needed are goals, objectives, and social and political norms that will properly direct the use of science. This is an acknowledgement that science is not self-directing, that applied science presupposes value judgments at the ethical level and, finally, that freedom consists in the ability to formulate and reformulate our attitudes toward the future, and these attitudes are nothing other than tendencies to respond in specified ways toward materials at hand in order to attain freely selected ends conditioned by the physical sciences, by our present environment and by our theory of the nature of man.

VI

To summarize the foregoing remarks, let us say that institutions of higher learning are now formulating their curriculums along two basic lines: the liberal, cultural courses, and the professional courses. Pure science serves as a foundation for the professional schools, but for the most part the professional schools are technicological, or constitute a training for the technician, the engineers of society who put pure research into practice. But before pure research can be put into practice, that is, before the engineer can do his work, there must be a goal, an objective, a desired end toward which he works in manipulating materials at hand. But since pure science and technology by themselves are neutral, but will lend themselves indifferently to the accomplishment of many alternative and even conflicting goals, each of which is attainable in a perfectly intelligible and rational manner from the standpoint of descriptive law, how do we come to know what these goals are or ought to be? My thesis is that in a democratic, free society men themselves may select these goals and that the liberal courses serve as a necessary pre-

requisite for wise choice. Choice implies freedom and freedom implies moral responsibility. Consequently from the fact of freedom we are justified in giving liberal courses, and because of liberal courses we can choose ends wisely. These ends, in turn, justify the actual application of pure science and professional knowledge toward the attainment of goals freely chosen.

No doubt some of you have been thinking about the place of religion in contemporary education. I have suggested that in a free society men not only choose the means of accomplishing goals but the goals as well. This means that there is no fixed goal, no *summum bonum*. Many religions have held that they not only know what the chief end of man is, but they also prescribe the means of attaining it. Until recently, for the most part, the conflict between science and religion has been due to the fact that religion claims to offer the means of accomplishing our goals, whereas clearly this should be left to science. This conflict involved the physical sciences only. Recently, however, there has been a conflict between the social sciences and religion and this conflict directly concerns the nature of man. But since the formulation of ethical norms is based on a theory of the nature of man, the social sciences, and especially anthropology and psychology, give rise to a criticism of authoritarian religions and seem to support humanism, whose prime thesis is that man himself, conditioned by a knowledge of the nature of the physical world with its alternative possibilities, selects the goals for which he is willing to devote his capacities. This means that the social sciences indirectly are encroaching on an essential prerogative of every religion; namely, the formulation of ethical norms based purportedly on a knowledge of the nature of man.

Actually what is happening is a reconciliation. Not that science is compromising with religion, but the meaning of our religious platitudes are continually changing under the influence of science. Contemporary theologians are happy to acknowledge that they are a product of a long evolutionary process so long as they can call the whole thing the handiwork of God. They are proud to interfere with natural events by building dams, overcoming plagues, preventing famine and, in short, precluding as many of the so-called "Acts of God" as they can so long as they are convinced that it is God's will. They are even willing to interpret the Biblical account of creation in terms of the facts and figures of a handbook in Geology so long as creation itself remains a religious mystery.

But actually the compromise is all one way, and theological students, being required to take courses in psychology and psycho-analysis, are willing to interpret the Augustinian statement of the nature of the soul in Freudian terms. Yet despite all this "backsliding" religion may well have the function of helping to clarify our goals or values and, because of its institutional structure, it may well help carry out a part of our educational, social, and political program and stimulate men to exercise freedom conditioned by knowledge attained in all of the sciences, in the humanities, and in philosophy.

EXPERIENCE IN CONTEMPORARY EDUCATION: I.

The Development of the Concept of Experience in Philosophy and Education

BY JOE PARK

THE PRESENT ARTICLE AND TWO ADDITIONAL ARTICLES which will appear in later numbers of this journal together constitute a study of Dewey's concept of experience. This study is not intended to be an appeal to return to the "good old days," or an attempt to glorify Dewey. The former can not be accomplished, and it is well that this is so. The latter is unwise. Dewey, after all, was human. He was capable of being wrong, as all of us are on occasions too numerous to mention. To look upon Dewey as the person who has provided those of us in education with the final words of wisdom is unfair to the man, unfair to his philosophy, and most of all, unfair to education.

While the writer does not agree with Dewey in all respects he does believe that Dewey's concept of experience has important implications for modern education. These implications need to be searched out and set down. To accomplish this end, this study begins by tracing the concept of experience in philosophy and education throughout western thought. It then seeks to set forth Dewey's concept of experience in education and to show how this has been modified by certain of his disciples.

For at least two thousand five hundred years man has been concerned with the proper place of experience in education. The concern extends throughout the history of education, from Plato to Dewey, and into present day considerations involving curriculum and method.

Plato was among the first to define experience and to relate it to education. He conceived of human experience as visible and intelligible. By visible experiences he meant those composed of images and sense impressions of "everything that grows or is made." Intelligible experiences include those in which the "soul uses the figures given by the former division as images; the inquiry can only be hypothetical." Finally, the soul of man can go on to absolutes or first principles, "proceeding only in and through the ideas themselves."[1]

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[1]Plato, *The Republic* (New York: Charles Scribner's Sons, The Modern Students Library, 1928) pp. 269–70.

	VISIBLE		INTELLIGIBLE	
Experiences	Images Shadows	Everything that grows and is made	Hypothetical Inquiry	Principles
Faculties of Soul	Perception of Shadows	Faith or Conviction	Understanding	Reason

FIGURE I. Plato's Kinds of Experiences and Faculties of The Soul

Having thus defined experience, Plato proceeded to relate it to a system of education designed for an ideal state. He began by describing an underground den in which human beings lived in chains and were restricted to a view of images cast on the wall of themselves and those moving by on the outside. To those in the den, truth can be nothing but the knowledge they have of the images.

Plato explained that one who might leave the den and who might see the sun would begin to reason that it was in "a certain way the cause of all things which he and his fellows have been accustomed to behold." Upon returning to the den, this man of light might then be at a disadvantage with his fellow men in seeing the shadows, because his eyes would be unaccustomed to the darkness of the den.

Now Plato explained the allegory in this manner: The den represents the world of sight; the light is the sun; and the journey upward from the den is interpreted as the ascent of the soul into the intellectual world. Plato then added:

> . . . my opinion is that in the world of knowledge the idea of good appears last of all, and is seen only with an effort; and, when seen, is also inferred to be the universal author of all things beautiful and right, parent of light and of the lord of light in this visible world, and the immediate source of reason and truth in the intellectual; and that this is the power upon which he who would act rationally either in public or private life must have his eye fixed.[2]

Plato then argued that "the power and capacity of learning exists in the soul already" and that it is the task of the state to demand that the best minds attain knowledge of "the good and true" and to use this while serving as rulers of the state.

Plato succeeded, therefore, in establishing two kinds of knowledge. The first was of images and of things and of a lower order, representing the unstable, the fleeting and the shadows of reality. The second was of understanding and of reason and produced in the case of reason, by the eye of the soul. It was in this latter kind of understanding that one came to know reality: the permanent, the absolute, and the ideal.

Plato's influence on contemporary thought has come down to us through the Christian tradition. It is manifest in emphasis upon the "other world", spiritual values, and absolutes. His influence is conspicuous among those who might be classified as idealists and supernaturalists. This viewpoint is particularly prevalent in parochial education in America today.

[2] *Ibid.*, p. 277.

ARISTOTLE AND THE MEDIEVAL CHRISTIANS

Aristotle, the most famous student to attend Plato's academy, was somewhat more of an empiricist than his teacher; however, he did not completely reject the idealism of his instructor. He laid stress on the rational principle in life which he interpreted as a reflection of the divine on the human sphere. It is evident that Plato and Aristotle agreed that the highest activity, and the greatest happiness, was to be found in contemplation of, and unity with, the divine. Ulich suggests that . . . "the sense of contemplation of divine things is for Aristotle the same as 'lifting the eyes of the soul to the divine light'."[3]

Aristotle was persuaded that the state should regulate education. He thought "children should be taught those useful things which are really necessary but not all useful things for occupations are divided into liberal and illiberal . . .".[4] The customary branches of learning, according to him, were: reading and writing, gymnastic exercises, music, and drawing. He doubted the value of music, however, as it was generally cultivated for the sake of pleasure.

Aristotle's influence has been considerable in the field of education. He supplemented Plato's concept of experience with the idea of empiricism. His philosophy provided a tool of logic, suggested the content of the typical curriculum of later antiquity, and some of his arguments are still used in the defense of liberal education. Furthermore, he furnished much of the wisdom which permitted the creation of a systematic Christian philosophy.[5]

The first century of the Christian era produced Quintilian, an educator who held little respect for philosophical discussions of metaphysical and ethical questions. He suggested that the philosophers had in fact invaded the province of oratory. His viewpoint generally ignores the world of spiritual affairs.

He plunges right into the discussion of the education of an orator by giving his aim.

> My aim, then is the education of the perfect orator. The first essential for such an one is that he should be a good man, and consequently we demand of him not merely the possession of exceptional gifts of speech, but of all the excellences of character as well. For I will not admit that the principles of upright and honorable living should, as some have held, be regarded as the peculiar concern of philosophy.[6]

In his works, which is really a kind of teacher's manual, he stressed the importance of play and agreeableness in education. He condemned flogging, seemed to imply some understanding of the modern idea of readiness, and called for the teaching of geometry because ". . . portions of this science are of value for the instruction of children: for admittedly it exercises their minds, sharpens their wits and generates quickness of perception."[7]

His writings provide us with an insight into the views of one of Rome's great teachers. They furnished the basis for much of humanistic education when they

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[3]Robert Ulich, *History of Educational Thought* (New York: American Book Company, 1950), p. 29.
[4]*Aristotles Politics* (translated by Benjamin Jowett) (New York: Modern Library, 1943), p. 321.
[5]Ulich, *op. cit.*, pp. 42–43.
[6]*The Institute Oratoria of Quintilian* (Translated by H. E. Butler) (New York: G. P. Putnam's Sons), pp. 9–11.
[7]*Ibid.*, p. 177.

were rediscovered during the Renaissance. During the Middle Ages his concern for the preparation of individuals for active and intelligent participation in society was over-shadowed by the Christian emphasis on the "other world."

In the Middle Ages the central intellectual problem of Western Europe was the reconciling of the religious values of the Church with the widely varying secular interests of the day.[8] Among the latter were feudalism and national sovereignty. Thus, it can not be said that the Medieval man was motivated completely by religious interests, for even some Popes behaved in a manner to reveal certain worldly interests during these years.

The foremost man of the early Middle Ages, as far as his influence upon the concepts of experience is concerned, was St. Augustine, bishop and theologian of North Africa. This great writer helped to continue the elevation of the soul and to subdue the things of the body and of sense experience. In his *Confessions* the Saint wrote:

> And I turned myself unto myself, and said to myself, "Who are thou?" And I answered, "A Man." And behold, in me there present themselves to me soul, and body, one without, the other within. By which of these ought I to see, my God? I had sought Him in the body from earth to heaven, so far as I could send messengers, the beams of mine eyes. But the better is the inner, for to it as presiding and judging, all the bodily messengers reported the answers of heaven and earth, and all things therein, who said, "We are not God, but He made us."[9]

In the later Middle Ages the controversy between the nominalists and the realists arose. This interesting debate concerned itself with whether the universal proposition was more real than the individual things observed. The realists drew their support from Plato while the nominalists buttressed their argument with an appeal to Aristotle.

It fell to St. Thomas Aquinas to reconcile the Christian faith with Aristotelian thought. This he did in an admirable fashion in his *Summa Theologica*. In this great work he distinguished between natural philosophy and supernatural theology. The former included everything open to argument and demonstrable by human reason. The latter included the changeless and the revealed truth. It was in this changeless realm that permanent, absolute, and ultimate reality could be known.

St. Thomas further clarified his position on experience in his question, "Whether any moral virtues are in us by infusion?" He wrote: "Now all virtues, intellectual and moral, that are acquired by our actions, arise from certain natural principles pre-existing in us. . . ."[10] Here he sounds much like Plato.

In another place in this volume the good Saint argues that:

> Some habits are infused by God into man, for two reasons. The first reason is because there are some habits by which man is disposed to an end which exceeds the proportion of human nature, namely, the ultimate and perfect happiness of man. . . .

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[8]R. Freeman Butts, *A Cultural History of Western Education* (New York: McGraw-Hill Book Company, Inc., 1955), p. 138.

[9]*The Confessions of St. Augustine* (Translated by E. B. Pusey) (New York: E. P. Dutton & Co., Inc., Everyman's Library No. 200, 1907), p. 209.

[10]*Basic Writings of Saint Thomas Aquinas*, Edited and Annoted, with an introduction by Anton C. Pegis (New York: Random House, 1945), Vol. II., p. 485.

> The other reason is, because God can produce the effects of second causes without second causes themselves. . . . Thus He gave to the apostles the science of the Scriptures and of all tongues, which men can acquire by study or by custom, though not so perfectly.[11]

In a third place he wrote:

> Now it is evident that the rational creature is more excellent than all temporal and corporeal creatures; so that it becomes impure through subjecting itself to temporal things by loving them. From this impurity the rational creature is purified by means of a contrary movement, namely, by tending to that which is above it, viz., God. The beginning of this movement is faith, since *he that cometh to God, must believe that He is*, according to Heb. XI. 6.[12]

It is difficult to overestimate the contributions of St. Thomas. Dewey believed that Aquinas held captive the minds of men for three hundred years.[13] Brinton shows that he provided the "central point of view" of Catholic Christianity.[14]

Swain has concluded that St. Thomas elevated the "theoretical intellect and theoretical knowledge above the claims of practical intellect and the knowledge to be obtained from experience."[15] Suffice it to say that St. Thomas' view still prevails in the minds of many and is directly reflected in the educational thought on which current Catholic parochial education is based.

THE HUMANISTS, BACON, AND LOCKE

But, the Renaissance which followed saw the emergence of the modern state, economic expansion, some revolts against the Church and its position, and the growth of secular thought. Among science, religion, and humanism, educators seemingly more readily championed the latter.

The aim of humanistic education was to produce a broadly educated person who could take leadership in the affairs of both state and church. He was to be acquainted with classical knowledge and at the same time be a man of effective action. The humanist drew heavily upon the writings of Cicero and Quintilian. Two well known humanists who wrote on education were Sir Thomas Elyot, the Englishman and Erasmus, that great Dutch intellect.

Although he was a statesman and a scholar, as well as a non-churchman, Elyot nevertheless still clung to the division of soul and body so prominent among the Greeks and the Medieval scholastics. This can be seen in the following quotation: "I suppose all men do know that man is made of body and soule, and that the soule in preeminence excelleth the body as moche as the maister or owner excelleth the house, or the artificer excelleth his instruments or the king his subjects."[16]

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[11] *Ibid.*, pp. 391–392.

[12] *Ibid.*, pp. 1120–1121.

[13] John Dewey, *Reconstruction in Philosophy* (New York:Mentor Book, 1950), p. 63.

[14] Crane Brinton, et. al. *A History of Civilization* (New York: Prentice-Hall, Inc., 1955), Vol. I, p. 285.

[15] James Edgar Swain, *A History of World Civilization* (New York: McGraw-Hill Book Company, Inc., 1947), p. 326.

[16] Sir Thomas Elyot, *The Governour* (London: J. M. Dent and Sons, Ltd., Everyman's Library Edition, 1907), p. 276.

The scholar of the Renaissance was Erasmus. He contended that man is naturally good and could be perfected through the use of the classics. In this stand, he resembles somewhat the self transcendence of Robert Ulich.[17] To Erasmus, religion was more a matter of human intelligence than mystical and emotional faith. In him we can see a decline in the emphasis on the other world. Brinton has said of him:

> Erasmus summed up almost all the main attributes of Renaissance humanism. He coupled a detached view of human nature with faith in the dignity of man, or at least of a few individuals. He joined love of the classics with respect for Christian values. But though he always considered himself a loyal son of the Church, he neverthless helped to destroy the universality of Catholicism.[18]

Whereas the Medieval period placed emphasis on the other world and universal order, the Renaissance found man seeking a revival of classical learning and projecting the results of this new learning into areas of human life beyond the confines of the Church. This was to lead to the reformation and the advent of modern science and the scientific method.[19]

It is the latter which is of chief concern in a discussion of experience in education. Near the end of the sixteenth century, Francis Bacon came upon the scene and helped to influence human thought in the direction of science and sense experience.

Bacon was born at York House in London on January 22, 1561. His father was Lord Keeper[20] to Queen Elizabeth and Anne. Studious and thoughtful, but somewhat sulky, Bacon became a favorite of Elizabeth who referred to him as the "Young Lord Keeper". He attended Trinity College, Cambridge where he developed his dissatisfaction with Aristotelian philosophy. He became a lawyer, a member of Parliament and Attorney-General. He later antagonized the Queen and finally was tried by the House of Lords for corruption and was found guilty. In spite of this, however, Richard Foster Jones evaluated the contribution of Bacon as follows: "With Bacon science became a movement: he was its founder and leader, the essential human element that gives life and vitality to all movements."[21]

Bacon made his position clear as to the nature of experience in the *Magna Instauratio.*

> Man, being the servant and interpreter of Nature, can do and understand so much and so much only as he has observed in fact or in thought* of the course of nature, beyond this he neither knows anything nor can do anything.[22]

Two pages later he explained that:

> There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from these

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[17]See his two volumes: *Crisis and Hope in American Education* (Boston: The Beacon Press, 1951); and *The Human Career* (New York: Harper and Brothers, 1955).

[18]Brinton, *op. cit.*, p. 455.

[19]Crane Brinton, *The Shaping of the Modern Mind* (New York: A Mentor Book, 1953), p. 88.

[20]Highest judicial officer.

[21]Francis Bacon, *Essays, Advancement of Learning, New Atlantic, and Other Pieces*, Selected and edited by Richard Foster Jones, (New York: The Odyssey Press, Inc. 1937, p. XV.

*By observation or reflection on observations.

[22]*Ibid.*, p. 272.

> principles, the truth of which takes for settled and immovable, proceeds to judgment and to the discovery of middle axioms. The other derives axioms from the senses and particulars . . . This is the true way, but as yet untried.[23]

The point which will immediately strike the critical reader is the respect in which this position held by Bacon differs from that held by Plato. The latter believed that "the power and capacity of learning exists in the soul already," and that the soul of man can go on to absolutes or principles, "proceeding only in and through ideas themselves." Francis Bacon definitely rejects the process suggested by Plato in favor of deriving "axioms from the senses and particulars. . . . so that it arrives at the . . . general." Pushing aside revelation and absolutes based upon reason and religious experience, Bacon hoped to establish absolutes by means of induction.

What were his contributions? First of all he placed emphasis on the senses as the source of human experience. He helped men to see that truth was a rather scarce item and that it needed to be pursued. He rejected the idea that teaching was passing on truth already possessed; in other words, indoctrination was dealt a blow. He proclaimed the day for inquiry, a philosophical concept to be extended by Dewey in the twentieth century. Finally, he did much to advance experimental science. This he accomplished more by suggestion than by experimental work of his own.

While Bacon wrote on education, scholars agree that his method was most successfully and directly applied to education by Comenius.[24] This great integrator of conflicting theories of knowledge and education was probably the first modern educator. In his *Didactica Magna*, his monumental work, he explained that all should be taught through the medium of the senses. He felt that to begin with the senses was to begin at the point nearest the child's present state of understanding. It is fruitful to compare him on this particular item with Dewey who thought it might be well to approach school subjects in an unscholastic manner ". . . if thought is to be aroused and not words acquired."[25]

Another person who was responsible for the extension of anti-absolutism in education was John Locke. In his anti-absolutistic stand, however, he did not reject the concept of soul. He tried to explain the laws of human nature in a manner which was in agreement with science. Locke never embraced the extreme materialists that some of his contemporaries did.

His theory of education began with the necessity of developing "a sound mind in a sound body."[26] He outlined a method of instruction, dependent upon a tutor, which would preserve health, develop honesty, encourage initiative, facilitate reason and critical judgment. Yet, he wished education to be "sport." In one place he relates how he has thought ". . . that if *play-things* were fitted to this purpose as they usually are to none, contrivances might be made *to teach children to*

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[23] *Ibid.*, pp. 274-275.

[24] Frank Pierrpont Graves, *A Student's History of Education* (New York: The Macmillan Company, 1925), p. 167; also John S. Brubacher, *A History of the Problems of Education* (New York: McGraw Hill Book Co., Inc., 1947), p. 205.

[25] John Dewey, *Democracy and Education* (New York: The Macmillan Co., 1916), p. 181.

[26] John Locke, *Some Thoughts Concerning Education* (London: Cambridge University Press, 1934), p. 1.

read, whilst they thought they were only playing."[27] But one should not deduce from this that Locke ignored discipline. Earlier in this same book he wrote:

> As the Strength of the body lies chiefly in being able to endure Hardships, so also does that of the Mind. And the great Principle and Foundation of all Virtue and Worth is placed in this: That a Man is able to deny himself his own . . . Inclinations, and purely follow what Reason directs as best tho' the Appetite lean the other Way.[28]

SOME AMERICAN THINKERS

About this same time America was granted the privilege of enjoying the fruits of a great mind in politics and education, Thomas Jefferson. In him can be found a protest against Platonic mysticism, a furtherance of Bacon's inductive method, and a practical concern for the affairs of this life, including formal education.

His position on religious mysticism is made clear in a letter to John Adams dated 1813:

> It is too late in the day for men of sincerity to pretend they believe in the Platonic mysticisms that three are one, and one is three; and yet that the one is not three, and the three are not one. . . . Sweep away this gosamer fabric of factitious religion, and they would catch no flies. We should all then, like the Quakers, live without an order of priests, moralize for ourselves, follow the oracle of conscience, and say nothing about what no man can understand, nor therefore believe.[29]

Jefferson viewed science as "more important in a republic than in any other government." And he looked forward to science and education advancing progress and making possible the promotion of the general welfare. In this stand he represented the line of reasoning of the seventeenth and eighteenth century enlightenment which reacted against absolutism in religion and monarchy, a closed economic system, rigid social stratification, and domination of intellectual life by ancient and medieval thought. In Jefferson, then, America had one of her channels for the transmission of liberal European thought.[30]

Others were to pick up this line of reasoning, expand upon it, and pass it on to the succeeding generations. In the nineteenth and twentieth centuries, two of the foremost exponents of the view of a mind actively engaged in reconstructing overt sense experience were James and Dewey. Both these men acknowledge their debt to Charles Darwin and his theory of evolution.

Charles Darwin published his *Origin of the Species* in 1859. In it he advanced the hypothesis that individuals in each species tended to survive when endowed with some variation which apparently gave them a better chance in their environment. These individuals producing offspring might accumulate variations which through many generations might develop new species.

By this theory man was seen to be made of the same stuff as all other living things. He no longer was a special act of creation; he emerged from lower life.

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[27] *Ibid.*, p. 131.
[28] *Ibid.*, p. 21
[29] Saul K. Padover, editor, *Thomas Jefferson on Democracy* (New York: A Mentor Book, 1939), p. 117.
[30] *Ibid.*, p. 90.

The concept of man held by the church was challenged. James could then say in one of his lectures that:

> Consciousness would thus seem in the first instance to be nothing but a sort of superadded biological perfection—useless, unless it prompted to useful conduct, and inexplicable apart from that consideration.
>
> Deep in our own nature the biological foundations of our consciousness persist, undisguised and undiminished. Our sensations are here to attract us or to deter us, our memories to warn or encourage us, our feelings to impel, and our thoughts to restrain our behavior, so that on the whole we may prosper and our days be long in the land.[31]

Although it was to be vigorously challenged, the notion of experience advanced by Dewey went beyond the one held by James. Building upon James' ideas, Dewey developed a theory of experience and related it to education in a manner still not fully comprehended. He revealed in an essay, *The Influence of Darwin on Philosophy*, that thinking to him was an activity, that thinking profoundly modified all other activities, including habit and impulse. He outlined the nature of thinking in his volume, *How We Think*. He rejected the idea of a fixed universe. To him, the meaningful life was the product of the constant alertness to and the reshaping and the remaking of experience. Perhaps the most unique contribution Dewey made, at least if one judges from Edman, was ". . . his relating of the reality of change to the urgencies and opportunities of human experience of change, and in a special sense, of the American democratic experience.[32] For better or for worse, Dewey has been recognized as the person who has refashioned contemporary thinking, not only in philosophy but especially in the area of education. The nature of his opinions concerning experience and education remain to be explored.

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[31]William James, *Talks to Teachers on Psychology* (New York: Henry Holt and Company, 1899), p. 24.

[32]Irwin Edman, *John Dewey: His Contribution to the American Tradition* (Indianapolis: The Bobbs-Merrill Company, Inc., 1955), pp. 29–32.

THE PROBLEM OF UNIVERSALS IN PHILOSOPHY OF EDUCATION*

BY GEORGE B. BURCH

I

EVER SINCE THE TIME OF PROTAGORAS AND SOCRATES THERE HAVE BEEN TWO THEORIES OF LIBERAL EDUCATION. Protagoras maintained that there is an essential core of wisdom which characterizes the free man, that he himself possessed this wisdom, and that he was prepared to sell it to his students. Socrates had no commodity to sell, but was prepared to give expert assistance in helping his students bring to light the wisdom with which they were already pregnant. Protagoras wanted to put wisdom into his students. Socrates wanted to draw it out of them.

Both theories have serious difficulties. Protagoras made liberal education a parody of vocational training, as if being a free man were one vocation among others. There is no fixed core of essential knowledge in liberal education, for the ideal of the educated man evolves, and even among contemporaries, liberally educated men differ in the content of their education. Advocates of the Socratic method, on the other hand, who merely want to help the student follow his own tendencies, ignore what for every actual teacher is one of the most conspicuous facts about teaching, the fact of student resistance. Students do not tend to become educated. The freshman is a potential graduate, but a potency is not a tendency.

Both theories have in common the focusing of attention on the student as the central figure in the educational process. Education is for his sake. The teacher's problem is how to serve the student in attaining his goal. I wonder if this emphasis may not be misplaced. Students are important, of course, but education begins with the teacher, and a philosophy of education might well inquire what the teacher's motive is.

The first theory makes the teacher analogous to an artisan producing an artifact by imposing a predetermined form on some suitable material. The finished product is the alumnus; the blueprint is the requirements for the degree; the workman is the teacher; the raw material is the beginning student. The profession is so well organized that spoilage is never blamed on the workman, always on the material, but conversely the workman gets relatively little credit for a fine product. The other theory makes the teacher analogous to a gardener. The gardener protects and fertilizes his plants, but what they become is determined by the nature of the seeds. The progressive teacher helps the student realize his own nature by proper cultivation, but he has to wait and see what seeds he was cultivating.

Neither analogy seems very apt. An artisan must follow his blueprint, but a good teacher teaches what he thinks ought to be taught. The graduate is indeed

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formed by his teachers, but not according to any fixed plan. On the other hand, the teacher is not a gardener cultivating seeds which have their own tendency to become something. A child without teachers would become nothing at all, would not even learn to talk. Language, ideas, and culture are not inherited from parents but acquired from teachers. "Acquired," however, is not quite the word. Culture is handed down from teacher to pupil somewhat as life is handed down from parent to child. A person *inherits* his cultural traits, as it were from his teachers, just as he inherits his physical traits from his parents. The relation of teacher to student is not so much like that of artisan to artifact or gardener to plant as like that of parent to child. This is the analogy which does seem apt, and it may provide some suggestions for understanding education. The purpose of this paper is to explore the possibility of understanding the process of education by analogy with the process of birth.

II

The relation of parent to child is more than a physiological relation. It is a metaphysical relation which can be understood only through a theory of universals. A living organism derives from its parents both its actual being and the specific form which makes it what it is.

The problem of universals is the problem of the ontological status of specific forms. In the twelfth century, when the problem of universals was the dominant problem of philosophy, philosophers distinguished four principal theories of universals.[1] According to the *realist* theory, the specific form is something eternal and is the essence of its individuals, which are one essentially, many accidentally. According to the *indifference* theory, the individuals of a species are many essentially but one "indifferently," that is, by not differing. According to the *class* theory, the species is the class[2] of the essences of all individuals of the same nature, and is constantly changing as it acquires new individuals. According to the *nominalist* theory, the species is only a word or a concept or a status which things have. The thirteenth century revival of Aristotelian studies made realism a sort of orthodoxy, while the fourteenth century reaction brought a revival of nominalism. In modern times, with other problems dominating philosophical thought, the problem of universals has come to be thought of as a controversy between realism and nominalism, and the indifference and class theories have been more or less forgotten. The indifference theory may be dismissed as merely a precise restatement of the problem, but the class theory, according to which the species is objective and real, yet changing in time, must be taken seriously.

I should suppose that the realist theory of universals might be defended in the realm of artifacts, since the individuals of any kind are made in accordance with an ideal form which exists before the individuals and independently of them. I should suppose that the nominalist theory might be defended in the realm of inanimate natural objects, since inanimate things are classified not so much by their essences as by accidental properties which happen to be of interest to us. But I

[1] Victor Cousin, *Ouvrages inédits d' Abélard* (Paris, 1836), pp. 513–541. Bernhard Geyer, "Peter Abaelards philosophische Schriften," *Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters*, xxi, 1 (1919), pp. 7–32.

[2] *Collectio* or *multitudo*.

do not see how either theory can be defended in the realm of living species, including the human species. The nominalist theory is refuted by the fact of heredity, the fact that children resemble their parents. Living organisms form species not because of the way we happen to classify them but because they are related genetically. But the realist theory is refuted by the fact of evolution, the fact that children do not resemble their parents perfectly, and that the differences accumulate over many generations. The species itself evolves, and has no eternal form. What does apply is the class theory. The species is only the totality of its individual members, but membership in the species is the essence of the individual. A living organism is what it is by having come into existence from another organism of the same species. This is just the difference between living things and inanimate ones.

III

A similar analysis can be made of the process of education insofar as it is analogous to the process of birth. The relation of teacher to pupil is more than a sociological relation. It is a metaphysical relation which can be understood only through a theory of universals. The "fellowship of educated men" into which we "welcome" our graduates is, like the human race, a universal. The traditional theory of education presupposes a realist theory concerning it. It assumes a universal idea or form of the Educated Man, conceives the teacher's business to be the imposition of this form, and judges the alumnus to be educated insofar as he participates in this form. No individual is perfectly educated, but some approach the ideal more closely than others—"summa cum laude," as we say. The progressive theory, on the other hand, presupposes a nominalist theory. It assumes that each person's education is an expression of his individual essence, so that the universal is only a concept or a common status. But neither theory is consistent with the facts. In the handing down of culture, just as in the handing down of life, nominalism is refuted by the fact of heredity and realism is refuted by the fact of evolution. Cultural heredity is the fact that educated men resemble their teachers in language, ideas, and culture. Cultural evolution is the fact that educated men do not resemble their teachers perfectly, and that the differences accumulate over many generations. Culture is neither an individual characteristic nor an eternal essence but a changing, evolving, living tradition. It can be correctly described only in terms of the class theory of universals. A culture is the totality or class of individuals having that culture, and conversely a cultured man, that is, a liberally educated man, is what he is as an educated man by his membership in that class. His membership in the class of educated men is not acquired by joining that class but by having come into existence as an educated man from other individuals already in it, that is, his teachers. This is just the difference between educated persons and uneducated ones.

It may be objected that the still uneducated pupil is already something, while the still unbegotten baby is nothing at all. The still unbegotten baby is nothing at all as a living being, but the matter which is to become the body of the baby already exists and is the potential baby in the sense of being the material cause of the baby. The form comes from the parents. The actual baby is the potential educated man, the material for the educated man. The form of the educated man as such comes from the teacher. If the teacher is analogous to the parent, the alumnus is ana-

logous to the child, and the beginning student is analogous to the matter from which the child is to be formed.

The validity of the analogy is not destroyed by difference in details. An educated man, to be sure, has many teachers. If each person learned all he knew from a single teacher or guru, it would be obvious that he was the cultural child of that guru and it would be easy to trace his cultural genealogy. The multiplicity of teachers complicates the educational process but does not change its nature. In life also we have a plurality of parents, that is, two. The greater plurality of teachers obscures but does not destroy the fact that the student's whole culture is received from his teachers as a continuation of theirs. All children, to be sure, are educated more or less, while all edible matter is not eaten. This, however, is an economic consideration rather than a metaphysical one. If food were so scarce that all food were eaten, we might value edible matter more highly from the point of view of life, although its value simply as matter would not be enhanced, and if human beings were so many that only some could have any education at all, we might value them less from the point of view of culture, although their value simply as human beings would not be decreased. Another difference is that we never meet a completely uneducated person, for liberal education begins at birth. The only completely uneducated persons are newborn babies, or the legendary wolf children who are human physically because they have human parents but not culturally because they have no human teachers. But the nature of education is not changed by the fact that we are such ardent teachers that we devour every pupil as soon as he appears. The hunger of culture is insatiable; it absorbs all possible material.

To summarize the analogy, the material cause of life is edible matter. The material cause of education is the student *qua* uneducated, even though he has some education already. The efficient cause of life is the parent actually living. The efficient cause of education is the teacher *qua* educated, even though in some ways he may be still uneducated. The formal cause of life is the species characterized by inheritable traits. The species is something objective, not a word or concept as the nominalists say, because it exists by genetic relationship apart from anybody's thought of it. But it is something changing in time, not an eternal idea or unchangeable form as the realists say, because it becomes something a little different with each new individual and something very different as evolution proceeds. It is, in short, not a form or a concept but a class—an objectively existing class whose members are related not only by similarity but also genetically. The formal cause of education is a specific culture characterized by language and other learnable traits. It is objective, yet changing in time, different with each individual and evolving indefinitely, not a form or a concept but a class, the fellowship of educated men.

IV

There is no final cause either of life or of liberal education. The notion of final cause is inseparably connected with the realist theory of universals. An artifact has a final cause because the ideal form which makes it what it is is determined by a purpose. The attribution of final causes elsewhere is an unwarranted extension of the realist theory from art to nature. Inanimate nature has universals only in the nominalist sense, and it is a fallacious anthropomorphism to attribute quasi-human purposes to its Creator. Living species are universals in the sense of the

class theory, and their propagation is not purposive. We do not produce children as we produce artifacts, in accordance with a plan and for a purpose, but in the same way in which other organisms produce their offspring, spontaneously reproducing our own nature. The same is true of liberal education, by which we reproduce our culture. Vocational training is an art, with a fixed curriculum determined by a purpose. Liberal education is free just because it has no purpose.

The Greeks had a word for this. *Schole*, leisure, the activity of the free man, means school. Freedom, leisure, and school are synonymous. The slave is compelled to work, but the free man naturally studies the liberal arts. This does not mean that psychologically it comes natural. We have no instinct to be free, but must be taught the arts of freedom even against our resistance. This is *schole*, liberal education. For the Greeks it was the prerogative of the free minority, but for us today, with shortened working hours and increased leisure, it is the most important education for everybody. *Schole*, liberal education, is not a preparation for leisure. It *is* leisure, the activity of the free man.

We teach better if we understand what we are doing. The teacher is not pursuing some purpose by which his success or failure can be judged. He is not helping the student to express himself. The teacher is expressing his *own* nature as an educated man by perpetuating his own culture. Liberal education is the handing down of culture, a universal objectively real but always changing, a class of minds which lives in its members and is newly formed by every one.

If this conclusion is true, it has three practical consequences for teaching. The first is that we should not evaluate our students, any more than we do our children, by the way in which they fit a pattern which we have anticipated. We should judge them by the health and fertility of their education, not by its particular form. The second is that we should not expect our students to provide their own motivation. We should accept on principle what we are usually compelled to accept in practice, that the motivation for study, as well as its content, must come from the teacher. The third is that we should look for the content of our teaching not in some interest expressed by the student or some requirement described in the catalogue but within ourselves. Whatever truth we feel makes us free, educated, and cultured—that is the truth we should freely hand down to our cultural offspring, and to do so is liberal education.

In this paper I have presented two hypotheses for your consideration. The first hypothesis is that life can be understood through the class theory of universals. The second hypothesis is that liberal education can be understood by analogy with life. If both are true, liberal education is neither an art nor a service but the spontaneous activity of the life of the mind.

BOOK REVIEW

COMMENTS ON BROUDY'S *Building a Philosophy of Education*. New York: Prentice Hall, 1954. 480 pp.

The primary emphasis in Broudy's book, *Building a Philosophy of Education*[1] is upon helping the college students build a philosophy of education by analyzing the major issues in education, evaluating the various approaches of the different philosophical systems, and reaching tentative conclusions on the basis of stated assumptions. This is an ambitions attempt, indeed. What a task for the college students to build a philosophy of education with only one or two courses taken in the field! How many of their professors have actually built an educational philosophy of their own is a question not hard to answer. However, I am going to confine my appraisal of the book to the basic view expounded without going into any other of its features.

To Broudy, Classical Realism (theories of Plato and Aristotle) "is still the most intelligible account of human experiences we have . . ."[2] Does he mean or imply that mankind has not made any progress or added anything new in the intelligible account of the intellectual inquiry and moral reflection during a period of over twenty centuries since the time of Plato and Aristotle? To me, such a sweeping statement is too strong, so strong that it is just a distortion of history and a denial of human progress.

For one thing, Aristotle's belief in fixity of species indicates that the idea of evolution is foreign to him. His conception of evolution "was not like Darwin's, conceived as the succession, in time, of simpler by more complex organisms. Aristotle regarded all species in the scale of nature as eternal, and eternal also their relation to each other in the hierarchy."[3] For another, Aristotle's doctrine of the multiplicity of celestial spheres with their respective revolutions, "a most complicated elaboration of a fundamentally erroneous idea," and its later development in the Ptolemaic theory, "retarded the progress of astronomy until the sixteenth century . . ."[4] On the other hand, the Chinese and Indians do not have to go to Plato for the needed contemplation and serenity in life. Most conspicuous of all, Jesus has certainly added something substantial and significant to the theories of Plato and Aristotle in the intelligible account of man's moral and spiritual reflection.

Let me be more specific. The educational historians, Eby and Arrowood[5] for instance, report that according to Plato and Aristotle the individual development is for the sake of the state, and the individual is not an end in himself. How is this measured against the modern concept of democracy? Is this not the very kind of ideology which has caused Toynbee to deplore that "the individual human being exists for the sake of the community, as the ant exists for the sake of the ant heap?"[6]

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[1]Broudy, Harry S., *Building a Philosophy of Education* (New York: Prentice-Hall, 1954).
[2]*Ibid.*, p. VIII.
[3]Tsanoff, Radoslav A., *The Great Philosophers* (New York: Harper and Brothers, 1953), p. 90.
[4]*Ibid.*, p. 89.
[5]Eby, Frederick and Arrowood, Charles Flinn, *The History and Philosophy of Education* (New York: Prentice-Hall, 1946).
[6]Toynbee, Arnold J., "Answers to Six Challenging Questions," *Readers Digest*, May, 1955, p. 88.

Maritain doubtless expressed his agreement with Toynbee in this regard when he rejected "the sheer collectivism of the beehive"[7] as answer to the question of the relation of individual and society. Both Plato and Aristotle advocate complete and rigid control by the state not only of education, but birth, nursing, marriage, property, and private life. Plato would abolish family system, limit the individual's rights, curb the liberty of opinions, and suppress experimentation, invention, and change. Aristotle gives women an inferior status. Both of them permit or defend slavery, and sanction the practice of exposure of infants. Neither makes provision for education of the laboring class and the masses, because the education for practical arts and common trades is vulgar and will "deform the body and degrade the mind." Both of them would allow only the higher classes to participate in state service. Again, to what extent is such a concept of democracy acceptable to the intellectuals of the twentieth century? Pericles' statement on democracy made in his famous Funeral Speech in 430 B. C. "seems to bear no necessary connotation of such a social ideal and such a human faith as characterize our own outlook. The social situation which Pericles praised, with its Metics and its slaves and its treatment of women, can hardly justify another conclusion."[8] Apparently the cornerstone of democracy—brotherhood of man—is not an integral part of the Athenian civilization.

Is Broudy advocating a "back to Plato and Aristotle" movement in the twentieth century? If the answer is affirmative, he is merely giving the same prescription to the American teachers as Hutchins did to St. John's College two decades ago. Of the original 100-book curriculum at St. John's, only two books are published in the twentieth century—both in higher mathematics. The only American thinker whose work is included is William James. This curriculum with its preponderant emphasis on science and mathematics does not, as is known, have the support of Richard Courant, Bertrand Russell, and Albert Einstein.[9]

Broudy claims that his Realism is an adaptation of the theories of Plato and Aristotle, and moreover, he tries to take account of the contributions of psychology, the science of education, and the more basic contributions of Dewey's Instrumentalism.[10] If his effort is to build a synthesis of the various value theories as he claims, then it seems there is no sense to label his position as Platonic and Aristotelian. No one would likely hold the view that Dewey repudiates the entire philosophies of Plato and Aristotle. However, Broudy is avowedly a Classical Realist. He is such a staunch follower of Plato and Aristotle that he would not hesitate to call their dissenters the truth distorters.[11]

He regards Classical Realism as "the preferred way by which pertinent problems can be solved."[12] This is logical, if Classical Realism can be demonstrated to be "still the most intelligible account of human experiences" we have in an in-

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[7]Maritain, Jacques, *Education at the Crossroads* (New Haven: Yale University Press, 1943), p. 89.

[8]Sayers, Ephraim Vern, *A First Course in Philosophy of Education* (New York: Henry Holt, 1952), p. 23.

[9]Hook, Sydney, *Education for Modern Man* (New York: The Dial Press, 1946,) pp. 219–220.

[10]Broudy, *op. cit.*, p. VIII.

[11]*Ibid.*, p. VIII.

[12]Shoemaker, F. L., "Book Review: Building a Philosophy of Education," *Educational Theory*, 4 (October, 1954), p. 301.

creasingly complex but shrinking world of the twentieth century. It would be intellectual suicide for the twentieth century to ignore the wisdom of these intellectual giants of history. But it appears incredible to advise our college students to go back to the writings of Plato and Aristotle to look for the answers to all the problems of today. "There is always risk in inquiry, in reflection, and in knowledge. . . . But there is no way of avoiding that risk. . . ."[13] To Broudy, it is just too bad that there is no way of avoiding inquiry, reflection, and knowledge! Of course, he does not appeal to any form of totalitarianism for help in avoiding such a risk. However, is it unfair to say that he is in agreement with Aristotle that the power of the people must be minimized and the participation of state service must be limited to those people "by nature free" in order to make democracy work?

Certainly I agree that it is a good thing to have a pleasant blend of the classical and the pragmatic. I had sympathy with the Essentialist Movement, and honestly I do not believe there was hot debate between Bagley and Dewey on this issue. However, the issue between Dewey and Hutchins is clear and different. To me, a return to Plato and Aristotle in the twentieth century is an extreme, instead of a blend. Frank C. Wegener of the University of Texas has been expounding his "organic philosophy of education", which, as I understand, is a form of synthesis in philosophy of education after a careful re-evaluation of various value theories. (Several of his articles on the subject have appeared in *School and Society* and *Educational Theory*). The late Stella V. P. Henderson made a similar endeavor in her book, *Introduction to Philosophy of Education*.[14] Yet, needless to say, she was avowedly a Kantian, not a synthesist either. I believe that it is Wegener's work rather than Broudy's which is in line with the idea of a blend in the philosophy of education. Dewey himself would be the last one to oppose the work of synthesis. I presume that educators generally agree with Mort and Vincent[15] that "Dewey knit together a consistent system of many of the ideas advocated by his predecessors." His system "is a carefully integrated residue of the emergent streams of Western thought."

The Platonic pursuit of perfection in the harmonious realization of man's capacities and the Aristotelian emphasis on rational balance provide a great source of inspiration, of which we need a more active recognition in our present-day educational program. However, it is an entirely different thing to accept, as does Professor Broudy in his book, Platonism and Aristotelianism as the best support in facing the uncertainties of the modern world. The problems of one generation differ in significant ways from those of another. Man can hardly be expected to think rationally beyond the limits of his times. Throughout history, civilization seems to develop through a process of synthesis, from which each generation learns for its own good and to which each generation gives its unique contribution to maintain and expand the continuity of human thought. Other than Plato and Aristotle, men in the twentieth century have much to learn from, to mention only a few names in the times of antiquity, Epicurus, Zeno, Laotze, Confucius and

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[13]Broudy, *op. cit.*, p. 411.

[14]Henderson, Stella V. P., *Introduction to Philosophy of Education* (Chicago: The University of Chicago Press, 1947).

[15]Mort, Paul R. and Vincent, William S., *Introduction to American Education* (New York: McGraw-Hill, 1954), p. 43.

Gautama. It seems apparent both logically and empirically that Classical Realism played an important role in the building of the great storehouse of truths, but it does not provide *the* answer to the problems of human life and destiny in our times.

H. C. SUN

MOVABLE FURNITURE AND A THEORY OF MAN

(*Continued from page 192*)

manipulation of intellectual concepts in his mind. Hence a grading system to measure growth in behavior, in addition to the one we already have in measuring growth in intellectual manipulation, is seen to be a necessary hand maiden to the idea of social promotion. And if this social creature called man requires for his developing sociality a geographical proximity to his fellows and a freedom to turn physically toward them and associate himself with them, then there is a clear rationale for the introduction of movable furniture.

Conceived in this sense, theory is the primary unifying agent in our lives. It makes possible a criticism of what we do to see if it is logically coherent with all else that we do. In this special office, theory performs a very *practical* task.

Viewed in this light we can say that a good theory is the most practical thing a man can possess. For as we stumble around from day to day, as we get lost among the trees of practical action, we can often save ourselves by withdrawing and viewing the forest of social reality in which we all move.

It is this connecting of trees with forest, practical action with theory, that is the singular, continuing obligation of modern man.

PERCEIVING PSYCHOLOGICAL MOVEMENT

(*Continued from page 195*)

The educator's already overwhelming burden is recognized and accepted. Yet, in view of the importance of continually fostering movement in the student, the educator is asked to consider the extra tasks involved in terms of the ultimate goals in mind. The mass education technique can be likened to a path of least resistance, but is this the path consistent with the traditional role of education? Should we not manifest greater overt effort to modify the distorted perceptions accruing to the concept of "final grades"? This can be accomplished if each of us perceives the utility of collective effort individually administered. The aim of educational evolution will be achieved through emphasis on movement rather than through emphasis on status and the student can be aided to perceive his own movement. Some of the difficulties and dilemma-like qualities are discussed in the light of "contrast" hypotheses deduced from Kelly's personal construct theory.[6]

[6]Kelly, G. A. *The Psychological Construction of Life* (New York: Norton, 1955), 2 volumes.